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The Anatomy of Public Works

**An exploration of the social protection function of public works
programmes in contexts of chronic poverty**

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ABSTRACT

This thesis critically explores the concept of the Public Works Programme (PWP) and interrogates the social protection performance of public works programmes (PWPs) in the context of chronic poverty, with a particular focus on the fundamental questions of programme incidence and impact. It reviews PWPs from both theoretical and empirical perspectives, using original qualitative and quantitative data drawn from a range of sources, including extensive field analysis and evaluations of PWPs in four countries in sub-Saharan Africa, interviews with the major multilaterals implementing PWPs and original survey work, designed, implemented and analysed by the author in South Africa to address the empirical issues arising from the current literature regarding PWP incidence and impact, as well as a literature review of over 200 PWPs implemented in east and southern Africa, detailed case studies of six international PWPs, and a review of both the social protection and public works literature.

The prevailing view among donors and government agencies with responsibility for social protection, is that PWPs are preferable to alternative social protection instruments in terms of the working age unemployed poor living in chronic poverty. This thesis explores the function and limitations of PWP in this context, and outlines major programme choice and design issues, drawing lessons from the international context, and challenging the assumptions underlying these policy preferences, thus opening the way for more informed and appropriate policy selection.

This thesis first identifies a number of conceptual problems in the current public works discourse, arguing that these arise primarily from the adoption of the generic term 'public works' to describe a highly heterogeneous policy instrument with a wide array of different forms and objectives, which encompass both social protection and also labour market objectives, in some cases resulting in conceptual and design tensions and contradictions. The thesis attempts to offer a response to the conceptual confusion in the literature by proposing a typology of PWPs, and a schema which explicitly recognises the diversity of PWP objectives, and the implications for programme design. In this way, the thesis aims to provide the tools for a more rigorous and robust international debate.

Having highlighted the conceptual difficulties associated with PWPs, the thesis then explores the questions of PWP incidence and impact, which are central to any assessment of PWP performance, but which have been neglected in the international literature, particularly with reference to sub-Saharan Africa. These questions are critically important, given that PWPs are frequently selected over alternative forms of social protection in the absence of an evidence base to illustrate their efficacy, often on the basis of unsubstantiated assumptions about their impact and social protection function. This thesis attempts to explore these issues of incidence and impact empirically, on the basis of a survey carried out on two case study PWPs in South Africa, linking programme performance to programme design choices.

ACRONYMS

AFRICATIP	Association Régionale des Agences d'Exécution des Travaux d'Intérêt Public
AGETIP	Agence d'Exécution des Travaux d'Intérêt Public contre le sous-emploi
ALMP	Active Labour Market Policy
ANC	African National Congress
ARV	Anti-Retro Viral
ASGISA	Accelerated and Shared Growth in South Africa
BAPPENAS	Bappenas Badan Perencanaan Pembangunan Nasional
BIDS	Bangladesh Institute of Development Studies
BIG	Basic Income Grant
CARE	Cooperative for Assistance and Relief Everywhere
CBO	Community Based Organisation
CBPWP	Community Based Public Works Programme
CCC	Civil Conservation Core
CDE	Centre for Development and Enterprise
CEP	Community Employment Programme
CFA	Communauté financière d'Afrique
CFW	Cash for Work
CHS	Community Household Survey
CORD	Community Organisation Research and Documentation
COSATU	Congress of South African Trade Unions
CRIMP	Central Region Infrastructure Maintenance Programme
C-SAFE	Consortium for Southern African Food Emergency
CSG	Child Support Grant
CSSR	Centre for Social Science Research (UCT)
CWA	Civil Works Administration
DID	Difference-in-difference
DFID	Department for International Development (UK)

DoL	Department of Labour
DoPW	Department of Public Works
DPRU	Development Policy Research Unit (UCT)
ECCD	Early Childhood Care and Development
ECD	Early Childhood Development
EIIP	Employment Intensive Investment Programme
ELR	Employer of Last Resort
EMP/INVEST	Employment Intensive Investment
EPRI	Economic Policy Research Institute
EPWP	Expanded Public Works Programme
ERRA	Ethiopian Rural Roads Authority
ESAU	Economics and Statistics Analysis Unit
EU	European Union
FAS	Foras Aiseanna Saothair
FBO	Faith-Based Organisation
FERA	Federal Emergency Relief Administration
FEWS	Famine Early Warning System
FFP	Food for Peace
FFW	Food for Work
FFT	Food for Training
FGT	Foster-Greer-Thorbecke
GDP	Gross Domestic Product
GE	Government Employment
GEP	Government Employment Programme
HBC	Home Based Care
HCBC	Home Community Based Care
HIMO	High Labour Intensive Works
HIV/AIDS	Human Immune Virus/Acquired Immune Deficiency Syndrome
HSL	Household Subsistence Line

IDS	Institute of Development Studies, University of Sussex
IFA	Inputs for Assets
IFP	Inkatha Freedom Party
IFPRI	International Food Policy Research Institute
IFW	Inputs for Work
IHS	Integrated Household Survey
ILO	International Labour Organisation
ILTPWP	Improving Livelihoods Through Public Works Programme
ISRDS	Integrated Sustainable Rural Development Strategy
JRY	Jawahar Rojgar Yojna
KDP	Kecamatan Development Programme
KZN	KwaZulu-Natal
LBIP	Labour-Based Infrastructure Programme
LFS	Labour Force Survey
LI	Labour Intensification
LIC	Low-Income Country
MASAF	Malawi Social Action Fund
MCC	Municipal Consultative Councils
MEGS	Maharashtra Employment Guarantee Programme
MIC	Middle Income Country
MIG	Municipal Infrastructure Grant
MTR	Mid-Term Review
NEDLAC	National Economic Development and Labour Council
NFBR	Net Financial Benefit Ratio
NGO	Non Governmental Organisation
NQF	National Qualifications
NREGA	National Rural Employment Guarantee Act
NREGP	National Rural Employment Guarantee Programme
NSNP	National Safety Net Programme

NTC	National Technical Certificate
NYA	National Youth Administration
OECD	Organisation for Economic Cooperation and Development
OHS	October Household Survey
PEL	Programme de Emergencie Laboural
PIG	Provincial Infrastructure Grant
PK	Padat Karya
PMU	Programme Management Unit
PPPs	Public-Private Partnerships
PSM	Propensity Score Matching
PWA	Public Works Administration
PWP	Public Works Programme
PSNP	Productive Safety Nets Programme
QUANGO	Quasi Non Governmental Organisation
RAL	Roads Agency Limpopo
RDP	Reconstruction and Development Programme
RRTF	Rural Road Transport Forum
SALDRU	Southern Africa Labour and Development Research Unit, University of Cape Town
SAQA	South African Qualification Authority
SETA	Sectoral Education and Training Authority
SMME	Small Medium and Micro Enterprises
SOCPEN	Social Pensions Database (Department of Social Development, South Africa)
SODS	School of Development Studies, University of KwaZulu-Natal
SPLIFA	Sustainable Livelihoods through Inputs for Assets
SPWP	Special Public Works Programme
SRM	Social Risk Management
Stats SA	Statistics South Africa
TASAF	Tanzania Social Action Fund

TB	Tuberculosis
TFDA	Targeted Food Distribution for Assets
UCT	University of Cape Town
UIF	Unemployment Insurance Fund
US	United States
USAID	United States Agency for International Development
VCT	Voluntary Counselling and Testing
WfW	Working for Wetlands
WfW	Working for Water
WFP	World Food Programme
WPA	Works Progress Administration

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1 INTRODUCTION AND RESEARCH QUESTIONS

This thesis examines the role of the Public Works Programme (PWP¹) as a social protection instrument in the context of chronic poverty. Public works programmes are popular instruments for the delivery of social protection in situations of chronic, as well as acute poverty, and are widely implemented throughout Asia, Latin America and Africa, often with funding from the major international donor agencies². PWPs are perceived to present a ‘win-win’ policy option; providing employment while also creating assets, and in this way offering a welfare transfer which is also a tangible economic investment, rendering them an attractive option for policy makers and donors.

However, the available evidence suggests that the assumptions underlying the selection of PWPs in preference to alternative instruments may be based on problematic conceptualisations of the term PWP, and unrealistic expectations about the potential social protection impact of such programmes, particularly when implemented in the context of chronic poverty. In the light of this, a fundamental question emerges, about which the current literature is largely silent: are PWPs an appropriate policy instrument to deliver social protection in the context of chronic poverty?

This thesis reviews this question from both theoretical and empirical perspectives, using original qualitative and quantitative survey data, together with a range of primary and secondary sources. The thesis draws on a body of original work by the author, including a review of over 200 PWPs implemented in east and southern Africa, detailed analysis of international case studies³, extensive original field research and evaluation of PWPs in sub-Saharan Africa⁴, a series of interviews with representatives of major multilaterals implementing PWPs⁵, an extensive literature review, and an original survey of PWP participants designed, implemented and analysed by the author in South Africa explicitly to explore the key empirical questions arising from the literature relating to programme impact and incidence. The thesis focuses primarily, although not exclusively, on an analysis of the social protection function of PWPs offering short-term employment in the context of

¹The acronym ‘PWP’ will be used in this thesis as a singular noun. Where public works programmes are being referred to in the plural the form ‘PWPs’ will be adopted.

² The World Bank, the ILO and the UK Department for International Development (DFID) are among major funders of PWP globally.

³ PWPs in India, Argentina, Ireland, Ethiopia, Indonesia and the USA.

⁴ South Africa, Zimbabwe, Malawi and Ethiopia

⁵ The World Bank, International Labour Organisation (ILO), and the UK Department for International Development (DFID).

chronic poverty in sub-Saharan Africa, and draws on detailed case studies from Malawi and South Africa.

The question of the social protection function of PWP in the context of chronic poverty and unemployment has been neglected in the international literature, but remains critically important, as it is not evident that the selection of PWP over alternative forms of social protection leads to an optimal outcome for the poor in such contexts. Much of the current development discourse, as articulated by donors and many government agencies with an interest in social protection provision, identifies PWP responses to the problem of the working age poor unemployed and underemployed⁶ living in chronic poverty, as preferential to cash transfer alternatives. However, the absence of an evidence base inhibits the potential for informed policy selection. This thesis explores the function and limitations of PWP in this context, focusing particularly on programme incidence and impact, and outlines major programme design issues, drawing lessons from the international experience.

In addition, the thesis addresses problems in the current discourse which arise from the adoption of the generic term ‘public works’ to describe a highly heterogeneous policy instrument with a wide array of different forms, by proposing a typology of PWP, and a linked schema of PWP objectives to provide the tools for a more rigorous international debate.

1.1 Core Definitions

Before proceeding further it is necessary to define the key terms used in this discussion: social protection, social security, social assistance, social insurance, chronic poverty and structural unemployment.

Social protection is a somewhat contested term (see Devereux (2007)), but for the purposes of this study may usefully be defined as:

‘... public actions taken in response to levels of vulnerability, risk, and deprivation which are deemed socially unacceptable within a given polity or society.’ (Conway, de Haan and Norton, 2000:5)

⁶ For the remainder of this paper, the term unemployed will be used to cover both these categories, for the sake of brevity. This shorthand reflects the fact that the division between these two categories is not necessarily absolute in many Middle and Low Income Countries (MICs and LICs).

Social security is a subcomponent of social protection, which comprises a ‘state-run method of income protection’, (Evans, 1998:258). Social security typically takes the form of a cash transfer but can also include state employment through some form of PWP. Social security programmes are conventionally divided into *social insurance* and *social assistance* (Conway *et al.*, *op cit*:5-6). Social insurance is contingent on prior contributions, while social assistance is non-contributory. In this thesis, in terms of their social protection function, PWPs are considered to be a form of social assistance, i.e. a non-contributory form of social security.⁷ Whereas the grants that form the bulk of social assistance interventions are primarily unconditional,⁸ PWPs require that work is performed in exchange for the social assistance transfer. While this thesis examines PWPs primarily in relation to the provision of *social protection*, it is important to recognise that PWPs are in some instances adopted as instruments of active labour market policy (ALMP), rather than social protection (Gottschalk, 1997), and sometimes as an instrument which can deliver simultaneously on both employment and social protection objectives. The tensions inherent in these differing objectives is explored in detail in chapters two, three and four, and is central to the conceptual confusion at the heart of the current public works discourse.

PWPs are defined in this thesis as all activities which entail the payment of a wage (in-kind or cash) by the state, an agent acting on behalf of the state, or NGOs, FBOs and other providers not associated with the state, in return for the provision of labour, in order to i) enhance employment and ii) produce an asset (either physical or social), with the overall objective of promoting social protection. Following Hulme, Moore and Shepherd (2001), *chronic poverty* is defined as a situation in which a significant proportion of the population remain in poverty between one period and the next, due to their inability to accumulate the productive assets required to exit poverty. The term *structural unemployment* is used to describe a situation in which a high level of involuntary unemployment persists over a prolonged period, and is primarily the consequence of shifts in the structure of the economy rather than an exogenous shock.⁹

⁷ It is important to note however that some argue that the work requirement itself constitutes a form of in-kind, rather than monetary, contribution, (Devereux 2008, pers comm), and as such PWP have characteristics of both social insurance and social assistance.

⁸ Grants with a social conditionality, such as participation in health care or education, are however increasingly popular, particularly in Latin America, (for the merits of such conditionality see Ozanira da Silva e Silva (2006)).

⁹ The term structural unemployment has been used to describe different scenarios in the literature. In this thesis the term structural unemployment is adopted as a short hand for unemployment which persists over a prolonged period as the consequence of inadequate effective aggregate demand which is primarily the consequence of the structure of

1.2 Origins of the Research Problem

This thesis builds on the body of research conducted by the author, starting with a cost-effectiveness analysis of PWPs in South Africa (McCord, 2002), which led rapidly to the identification of key data problems in terms of lack of information on incidence and impact. If the existing literature is examined, it becomes clear that any policy conclusions based on either the cost of programme implementation or any imputed social protection benefit accruing from PWP performance are highly problematic and compromised by severe data and conceptual constraints.

Awareness of the simultaneous absence of an adequate empirical evidence base for PWP performance, and the implementation of large numbers of PWPs across sub-Saharan Africa, whose effectiveness was in serious question, and for whom the likelihood of meeting ambitious goals set out in programme rhetoric was extremely low, led the author to explore and, where possible, shed light on some of the questions ignored in the mainstream policy debate, and to attempt to offer some contributions to developing a more rigorous and systematic analysis of PWPs and their social protection function.

On the basis of formal programme evaluation work¹⁰ the author increasingly came to suspect that many PWPs might be costly, inefficient and ineffective in terms of their social protection impact, particularly in the sub-Saharan African context where data on programme impact, incidence or cost are almost uniformly unavailable. This situation has an added urgency given the lack of voice of PWP beneficiaries, for whom PWPs have been repeatedly selected in preference to alternative policy options which may be more effective in terms of the provision of social protection in the context of chronic poverty and structural unemployment.

From these concerns a critical question emerges regarding the efficacy of the social protection function of PWPs in the context of chronic poverty. It is this question which this thesis attempts to address by exploring a series of related issues. Foremost among these issues is the concern that PWP performance is critically linked to the specific labour market context, and that a generic form of PWP offering short-term employment, which typifies PWPs in sub-Saharan Africa, may represent a

the economy rather than the business cycle or an exogenous shock. In this form of unemployment, the number of unemployed exceeds the number of job vacancies, so that if even all open jobs were filled, some workers would remain unemployed.

¹⁰ The author participated in independent reviews of five donor funded PWP with social protection objectives in South Africa and Malawi between 2003 and 2005.

mismatch of form and function. Such programmes may not reduce poverty or improve livelihoods in the medium to long term, and the benefits accruing may be only temporary, rendering PWPs not developmental instruments, as often anticipated, but rather instruments offering only a transitory respite by providing a temporary reduction in the depth of poverty. The implication of this concern, which finds echoes of support in the findings of a small number of other researchers, is that PWPs may not, as has frequently been anticipated, result in effective and low-cost targeting of resources to the poorest, or confer sustained social protection benefits, and are not necessarily a cost effective means of delivering support to this group. The question of incidence is also raised, and when the lack of data on this issue is taken into account, it becomes clear that PWP popularity is largely based on a set of assumptions and beliefs, and possibly also ideologically informed preferences, rather than any form of evidence base. These are the major concerns and insights emerging from programme experience which led the author to attempt this exploration of the anatomy of the social protection function of public works programmes.

In the light of these research concerns, this thesis focuses on the question of state and donor interventions to promote social protection through PWPs. PWPs are a key component of the current social protection framework in many sub-Saharan African countries, inasmuch as these countries have an explicit social protection strategy, often constituting the only form of social security for the able-bodied working age poor. PWPs are centrally placed in the conceptualisation of social policy and are ascribed considerable potential in terms of addressing the core challenges of both unemployment and poverty. Despite this policy prominence, both PWP incidence and their microeconomic and labour market impacts have not been studied systematically, and almost no research has examined these questions in relation to PWPs implemented in sub-Saharan Africa, rendering evidence-based policy development in this area problematic.

1.3 Literature Review and Research Questions

The major areas of contemporary research into PWPs have been related to their cost-effectiveness in terms of cost per unit of wage transferred to participants. Ravallion and Subbarao have carried out seminal work examining the cost-effectiveness of the PWP as a transfer instrument (see, for example, Ravallion (1998); Subbarao *et al.* (1997)). This work examines the efficiency of PWPs as a mechanism to deliver social protection from a primarily economic perspective. However, the literature is extremely limited on the question of the impact of PWPs:

‘An exhaustive literature search revealed a surprising dearth of detailed and credible evidence on the impacts of employment creation across the world.’ (Devereux and Solomon, 2006:37)

This problem is particularly acute in terms of the impact of the short-term PWP most frequently implemented in sub-Saharan Africa, with most of the limited research carried out to date focusing on PWP in Asia or South America. In addition, the extant literature does not attempt to analyse in detail the way in which PWP participation confers social protection benefits, tending to focus primarily on the monetary value of the wage. The literature is also limited on the question of PWP incidence, i.e. which segments of the population participate in PWP. This constitutes a major omission if the social protection performance of PWP is to be assessed. The implication of these omissions is that attempts at either cost effectiveness or impact analysis are severely compromised by a lack of empirical evidence, rendering any form of evidence-based policy choice highly problematic, with regard to the selection of PWP or alternative social protection instruments. The two concerns, incidence and impact, are discussed below, in relation to the international literature.

A number of critical additional issues also emerge from the existing literature: the lack of conceptual clarity or consistency regarding the term PWP, the empirical challenges to the assumed self-targeting of PWP which lies at the heart of the PWP concept and the significant gulf between programme expectations and outcomes. These issues are summarised below, and reviewed in detail in the body of the thesis.

Incidence

There is very little evidence outside South and Eastern Asia on PWP incidence and therefore the distribution of PWP benefits. The research available is primarily focused on the Indian Jawahar Rojgar Yojna (JRY) (see for example Ghosh and Guha-Khasnobis (2006)) and Maharashtra Employment Guarantee Scheme (MEGS) (for example Gaiha (2000, 2005)), and the Indonesian Padat Karya (PK) (Suryahadi *et al.*, 1999), with no similar systematic analysis of PWP incidence being documented in sub-Saharan Africa. This research lacuna is critical, yet not identified in the literature as problematic. In the absence of such evidence, it is widely assumed that PWP spontaneously result in the allocation of resources to the poor. Hence the selection of PWP over alternative instruments is frequently predicated on the assumption that the poorest will self-select into PWP on the basis of the limited wage, which renders PWP employment unattractive to the non-poor.

However, the limited empirical evidence available challenges this assumption, suggesting that significant inclusion and exclusion errors can prevail within PWP despite the limited wage (Lembani

and Madala, 2006). This implies that it cannot be assumed that PWP effectively channel resources to the poorest on the basis of self-selection, and highlights the need for empirical incidence analysis to establish an evidence base on which segment(s) of the population actually participate in PWP in each context. The implementation of a social protection instrument in the absence of information on incidence is highly problematic. Unless the characteristics of the group benefiting from the transfer are known, it is not possible to assess the extent to which social protection objectives are being met, yet this lack of targeting information is typical in PWP implemented throughout sub-Saharan Africa. Current examples are the national Expanded Public Works Programme (EPWP) in South Africa, and the Malawi Social Action Fund (MASAF) PWP, neither of which systematically gathers baseline data on the socio-economic characteristics of their participants, despite both programmes being nominally intended to support the poorest among the working age unemployed.¹¹

Impact

PWP impact can be assessed in terms of both the immediate social protection impact during the period of participation, and the intermediate or sustained impact after programme participation has been completed. The discussion of both dimensions of impact in the literature is reviewed below.

Within the social protection discourse (among donors, implementing agencies, programme designers, civil servants and politicians), there is a dominant assumption that the implementation of PWP will confer significant short-term and frequently also medium to long term social protection benefits, irrespective of their duration or other design features. Even the academic literature is relatively scarce in terms of a critical engagement with the theoretical basis for expecting PWP to have a significant social protection impact. There are only a limited number of academics working in this area generically, most notably Subbarao and Ravallion (see, for example, Subbarao (1997, 2001, 2003); Subbarao *et al.* (1997); Ravallion (1998) and Ravallion *et al.* (1991, 1995)). There are only a small number of others working on either area or country-specific analysis outside Asia, notably Devereux in southern and eastern Africa (see for example Devereux (2000) and Devereux and Solomon (2006)), Adato and Haddad in South Africa (see Adato *et al.* (1999, 2001)); Sharp in Ethiopia (Sharp *et al.*, 2006); and Chirwa and Mvula in Malawi (Chirwa *et al.*, 2004a, 2004b; Chirwa and Mvula, 2004; Chirwa, 2007). There is a larger body of research on PWP in India, most notably the works of Datt,

¹¹ While baseline data on participants are not gathered in either programme, it should be noted that recent work by Lembani and Mandala (2006) has attempted to make an initial assessment of the relative effectiveness of PWP self targeting and community based targeting in the MASAF PWP.

Dev, Dreze, Gaiha and Ravallion, and this country has produced a particularly rich seam of research related to the long-running MEGS, which was initiated in 1965, the Jawahar Rojgar Yojna (JRY) and the recently launched National Rural Employment Guarantee Programme (NREGP). The work examining the JRY and MEGS tends to be of greater methodological sophistication than work on other PWPs, largely due to the 30-year history of the scheme, which has facilitated the possibility of gathering longitudinal data, and has offered a rich source of material for analysis.

Throughout this literature, however, the focus is on an assessment of the short-term social protection impact during the period of participation in the programme, and much of this work tends to make use of simplifying assumptions which do not give adequate recognition of critical factors inherent to PWPs, rather than other forms of social protection. Of greatest significance among these factors are: the extremely limited attention given to income forgone when calculating the net income benefit from programme participation (with the notable exceptions of Lipton, (see for example Lipton, Yaqub and Darbellay (1998)), and Jalan and Ravallion (2003), as discussed in Van de Walle (1998); omission of consideration of non-remunerated activities forgone (domestic work, child care; completion of subsistence farming responsibilities, etc.) and their impact on short- and medium-term livelihoods; the significant but generally invisible issue of the cost of accessing PWP employment, in terms of a range of rents associated with controlling access to PWP employment (Pellisery, 2008); and the disturbing finding illustrated most recently in research from Bangladesh that the physical labour requirements of a PWP may entail a trade off between household welfare benefits and individual PWP worker costs, with malnutrition increasing significantly among PWP workers while overall household nutritional status improved (Helen Keller International, 2007).

These factors indicate that the nature of PWPs presents a series of analytical challenges in terms of social protection impact, over and above those commonly considered in the social protection discourse. It is interesting to note that all but the first of these issues is excluded from discussion in the otherwise excellent social protection evaluation chapter on PWP evaluation in the World Bank's social protection toolkit (Ravallion, 2003).

However, with the notable exceptions of Ravallion and Subbarao, the PWP literature has been characterised by the paucity of attempts to evaluate even actual short-term benefits resulting from PWP participation, with the primary research focus being the cost of the resources expended through a PWP, in terms of allocations to wage and assets, or the number of days of employment offered, with a resolute focus on process indicators and proximate rather than ultimate outcomes,

failing to address the core question of impact. The monitoring and evaluation system of the South African Expanded Public Works Programme (EPWP) provides an example of the input oriented monitoring-and-evaluation style which is typical of PWP monitoring and analysis throughout the continent (Karuri *et al.*, 2007).

Besides the inadequacies of much of the analysis of current impact of PWP participation outlined above, the second major omission in the literature is the question of the medium to long-term social protection impact of PWP implementation. This question is not so urgent in the case of PWPs designed to address a short-term crisis, offering a single episode of basic consumption smoothing over a limited period of labour market disruption, or ongoing or repeated periods of social assistance as required, although it is also of interest in these instances, if there is an interest in assessing the longer term significance of such interventions. However, where the labour market or livelihoods problem is chronic, or repeated, and the nature of the PWP selected to provide social protection in this context is a single, often brief episode of PWP employment, the question of the social protection impact of this episode of employment becomes critical if an assessment is to be made of the appropriateness (in terms of impact and cost) of such an intervention. This situation is typical in sub-Saharan African PWPs (South Africa, Malawi, etc), in which a short episode of PWP employment is offered in the context of a cyclical or chronic labour market or livelihoods crisis, with the intention of achieving a sustained social protection benefit. It is this situation in particular which this research attempts to interrogate critically.

There are only a very limited number of references to the research gap relating to the medium to long term impact of PWPs in the literature. One such example is offered by Ravallion who recognises the need to consider a programme's impact after the period of disbursement:

'The study period is rarely much longer than the period of the program's [PWP's] disbursements. However, a share of the impact on people's living standards *may occur beyond the life of the project*. This does not necessarily mean that credible evaluations will need to track welfare impacts over much longer periods than is typically the case – raising concerns about feasibility. But it does suggest that evaluations need to look carefully at impacts on partial intermediate indicators of longer-term impacts [...] even when good measures of the welfare objective are available within the project cycle.' (2003:10) (emphasis added)

Ravallion suggests using a proxy indicator such as savings accrued from the PWP wage income as an 'intermediate indicator' for possible future welfare gains beyond project duration; an approach adopted in Chen and Ravallion (2003). The adequacy of such an indicator is questionable for a number of reasons, including the fact that social protection gains may be achieved through vectors

other than the wage. However, the fact that Ravallion recognises the need to consider future impact of the programme is almost unique in the literature, and such analysis is scarce, largely due to the conventional evaluation timeframe outlined by Ravallion above. This represents a critical insight, namely that evaluation tends to be restricted to the duration of programme implementation and disbursement, or at best the period directly thereafter, and so excludes an assessment of performance against any intermediate or longer term objectives ascribed to the programme. This is a significant omission in terms of the current attempt to assess the social protection impact of short-term PWPs in the context of chronic poverty, as the ability to assess impact ‘beyond the life of the project’ is critical if a meaningful analysis of social protection interventions intended to proffer sustained benefits is to be made.

Given the large number of PWPs offering short-term episodes of employment currently being implemented as ‘social protection’ interventions in contexts of chronic unemployment with objectives relating to *sustained* reductions of poverty, an exploration of this issue is long overdue. Examples of such programmes include the MASAF PWP in Malawi (UK DFID, 2002), the Tanzanian Social Action Fund (TASAF) PWP (World Bank, n.d.), and the EPWP in South Africa (Karuri *et al.*, 2007).

Lack of Conceptual Clarity of the Term PWP

The term PWP is used widely in the literature as though the term had a commonly accepted meaning. However, this undifferentiated use of the term is problematic, as it results in a range of different programmes which share the common PWP work requirement and in many (although not all) instances, social protection objective, but are otherwise disparate in form, design and implementation modalities, being described by a single nomenclature. In some cases PWP are considered to be instruments of active labour market policy rather than social protection *per se*, representing a further variant of the PWP concept, wherein the generation of additional aggregate employment, (conferring indirect social protection benefits), rather than the provision of direct social protection benefits to a specific target group through the wage transfer, is the primary objective (Gottschalk, 1997). Despite the multiple and diverse forms PWPs may take, this complexity is not recognised in the literature, which instead elides different concepts and programme interventions under a single generic nomenclature, at the expense of analytical and conceptual clarity, often resulting in problematic programme design choices and programme expectations (McCord, 2004a). This lack of clarity in the PWP literature contributes to a lack of informed and critical discussion around the social protection function of PWPs, by failing to recognise the nuances which

distinguish different kinds of programmes, and the fact that specific and distinct design characteristics are required to achieve the anticipated social protection outcomes in different contexts. The unproblematised adoption of the generic term PWP has resulted in the widespread implementation of PWPs in which the form selected is not appropriate for the particular labour market or socio-economic context, or indeed the desired social protection outcomes, with the result that programmes repeatedly fail to meet the policy expectations.

A related issue resulting from the lack of conceptual rigour regarding the form and function of PWPs is the empirically unsubstantiated discussion of PWP as substitutes for cash transfers in much current policy debate. The literature is silent on this problematic assumption of the two interventions' substitutability.

Does Self-targeting Work?

An additional major area of contestation emerging in the literature is the question of whether the work requirement and low wage lead to 'self-targeting' on the basis of 'less eligibility', in the sense that only the poorest would choose to participate in PWP where there is a physical labour component and low wages (see discussion in Meth (2003)), as anticipated in the conventional PWP discourse. The mainstream PWP literature tends to assume and reiterate the desirability of the 'less eligibility' criterion for participation in PWP, in the sense that it offers a low cost way of targeting the poor (see, for example, Subbarao (1997)), rather than requiring external control and screening, with the associated costs:

'Maintaining the program wage at the level no higher than the ruling market wage for unskilled labour can enable the poor to self-select themselves into the program.' (Subbarao, 1997:5)

Subbarao goes on to argue that an additional benefit associated with a relatively low wage rate is that it is most likely to prevent rationing of access (*ibid*). If a programme is implemented on such a scale that employment is available to all the eligible poor who seek it, then such an approach does have the potential to prevent rationing of access. However, such situations of programme scale exceeding or matching programme demand are extremely rare, with anecdotal evidence suggesting that demand outstrips employment availability in almost all cases, although typically, data are not systematically gathered on this critical question. It is also commonly argued that such an approach reduces the risks of labour market distortion inherent in a PWP that offers wage rates above the prevailing norm (*ibid*).

However, this literature has in recent years been questioned from two main perspectives, most notably by Barrett and Clay (2003). The first is whether the limited wage does result in participation of the intended beneficiaries, and the second is whether the payment of a low wage to facilitate targeting might cause a tension with the social protection objectives of the intervention (see for example Devereux (2002)). Subbarao himself concedes this latter point, but does not pursue it in terms of the social protection implications (Subbarao, 1997:2). Recent ex-ante analysis based around the NREGP in India also argues that drawing on prior experience with the MEGS, major inclusion errors are likely if the self-targeting approach is adopted in India, resulting in a significant cost premium, compared with alternative cash transfer options, if PWP are the social protection instrument selected to address poverty (Murgai and Ravallion, 2005).

Anticipated PWP Outcomes

There is, within the practitioners' discourse around PWP, a prevalent and much repeated assumption that PWPs, particularly labour-based infrastructure creation, represent a way of killing two birds with one stone; addressing both the infrastructure and the poverty deficit simultaneously, by creating infrastructure, while at the same time providing employment which offers a route out of poverty (Tessem, 2007).

This assumption is summarised in the following statement at the 12th Regional ILO Seminar on Labour Intensive Practices, which represents the ILO position on the relationship between PWP and social protection, and asserts that the adoption of labour-based methods will result in significant employment (and by implication poverty reducing) benefits:

'In Africa, as in many other developing countries, the twin challenges of employment and infrastructure have been recognised as the most pressing if the national and regional development goals set by ourselves and those we have agreed to collectively, i.e. Millennium Development Goals, are to be met. Employment-intensive investment approaches present an opportunity through which the two challenges can be addressed simultaneously.' (Amri-Makhetha, 2007)

From the existing literature, there is little evidence to support the contention that PWPs have the potential to provide employment and poverty reduction on the scale anticipated in such statements, which nevertheless are largely unchallenged within the social protection discourse. It is not evident from the available evidence base that significant¹² amounts of additional employment are likely to be

¹² It is important to note that what constitutes 'significant' in this context is subject to contextual and programme

created through most current PWP, or that the nature of employment offered (in terms of wage rate and duration) is adequate to have a significant impact on anything other than short-term poverty reduction, particularly in the context of chronic or repeated un- or underemployment.

This is indicative of a mismatch between the social protection and poverty reducing impacts which are frequently ascribed to PWPs, and the outcomes which both the theoretical and empirical analysis suggest are likely to result from PWP implementation. The key problems here are the poor empirical evidence base on which to draw, and the lack of critical theoretical engagement around the question of PWPs in relation to social protection. It is this critical gap which this thesis attempts to highlight, and take steps towards addressing.

1.4 Outline of Thesis

Exploring these neglected questions, and attempting to develop a more systematic and critical analytical approach to the potential of PWPs in terms of social protection delivery is the central challenge of this thesis. The thesis comprises twelve chapters which interrogate the questions and debates discussed above, and attempt to set out a framework for a more robust and critical engagement with public works in the international discourse.

This first chapter sets out the rationale for the thesis and outlines the key research questions which the thesis addresses, offering a brief overview of current literature and highlighting the core questions of PWP incidence and impact, with particular reference to sub-Saharan Africa. The critical problem of the lack of consistent PWP terminology and associated lack of rigour in the discourse is raised, particularly in the context of the social protection function of PWPs, together with the implications of this conceptual confusion in terms of lack of clarity regarding realistic and appropriate programme objectives.

As a contribution to improving the rigour of the debate two tools are presented in the second chapter. The first is a typology of PWPs, intended to differentiate between a range of different forms of PWP. The second is a schema of PWP objectives which attempts to identify the different objectives which are adopted in PWPs internationally in various combinations. The argument made is that the current conceptual confusion and adoption of generic terminology results in an inadequately robust link between the type of PWP selected and anticipated programme outcomes.

goal-related assessment.

The critical importance of adopting an appropriate PWP for the particular labour market or social protection context is highlighted, and the risks of adopting a generic form of PWP which has not been purposively selected for its relevance and potential to the specific labour market context are set out, noting the limited social protection potential of PWPs offering short-term employment in the context of chronic poverty and elevated unemployment.

Having established the mismatch between PWP form and function in many instances, the relationship between PWPs and social protection is discussed in detail in chapter three, drawing on the typology and objectives schema set out in the previous chapter, and the potential vectors through which PWPs might deliver social protection benefits is explored. On the basis of a scrutiny of the literature, policy statements and empirical evidence, three vectors are identified through which social protection benefits may potentially accrue to programme participants. These are: wage, assets and skills development, a formulation which extends the prior conceptualisation of PWP impact vectors.

In chapter four the adequacy of the existing PWP impact and evaluation literature is discussed, with a critical review of the cost effectiveness approach which has dominated PWP evaluation in recent decades. Next, in chapters five to seven, each of the social protection vectors identified in chapter three (wage, assets and skills development) is assessed in terms of its own merits and social protection potential, in an internal critique of the PWP approach.

Next, taking into account the shortfalls in the PWP evidence base, a detailed original case study of PWP incidence and impact is examined, using empirical data to interrogate and illustrate the conceptual arguments set out in the previous chapters, and review each of the three vectors of transmission from an empirical perspective, in chapters eight to eleven. This empirical study explores the contribution of PWPs to social protection in South Africa, drawing evidence from two PWP case studies, one offering short-term full time employment at a restricted wage, and one offering ongoing part-time employment at the market wage, but adopting community targeting to reach the poorest. The case study attempts to provide some initial responses to the central questions of incidence and impact, examining the targeting of PWPs and their social protection impact in order to identify key policy lessons and establish an evidence base for future policy development.

Finally, conclusions are drawn in chapter twelve. The primary conclusions are that it is not useful to continue the generic usage of the term PWP, that there is a serious dissociation between form and intended function in many PWPs, and that the continued implementation of archetypal short-term

PWPs, such as those implemented in much of sub-Saharan Africa, is not an appropriate response to the problems of chronic poverty. The current PWP situation results in poor performance in terms of social protection outcomes and, inasmuch as the existing evidence base allows us to make informed analysis, low levels of cost effectiveness. The lack of application of academic rigour and scrutiny to the range of interventions grouped under the generic PWP term is a problem, whose cost is borne by the working age poor throughout sub-Saharan Africa, in terms of poorly conceptualised programmes which demand a heavy burden of labour inputs from the poor for whom labour may be a scarce resource, and significant cash and administrative skills inputs from governments (which are in many cases also scarce resources), but do not necessarily offer commensurate benefits for either party, and may be a sub-optimal policy response to the question of social protection for the working age poor.

A discussion of the potential ideological factors underlying the choice of PWPs over alternative social protection interventions is included in appendix 1.

2 WHAT ARE PUBLIC WORKS PROGRAMMES?

This chapter offers a working definition of PWP and gives an overview of the diversity of forms of PWP, before briefly outlining their history as an instrument of social protection this century. Next, the heterogeneity of the PWP concept is highlighted, and the conceptual confusion that arises as a result of the use of the generic term PWP to describe a range of highly diverse programmes without making any distinction between different forms. In an attempt to address to this problem, a four-part PWP typology and schema of PWP objectives are developed in the hope that they may provide a framework for a more systematic and insightful engagement with PWPs in future literature, and promote increased clarity in the PWP discourse .

2.1 PWP Definitions

There are many different kinds of public works programmes (PWP), but the key components are the provision of employment for the creation of public goods at a prescribed wage for those unable to find alternative employment, in order to provide some form of social safety net. For the purpose of this thesis, PWP are defined as all activities which entail the payment of a wage (in cash or in kind) by the state, or by an agent acting on behalf of the state, in return for the provision of labour, in order to i) enhance employment and ii) produce an asset (either physical or social), with the overall objective of promoting social protection. The concept is defined more loosely in much of the literature linked to the World Bank, as set out by Subbarao, who defines public works programmes as:

‘... programmes in which participants must work to obtain benefits. These programmes offer temporary employment at a low wage rate, and have been widely used for fighting poverty.’ (2001:2)

It is interesting to note, according to this definition, that PWP are inherently temporary, an issue which will be discussed in detail below.

There are a number of variant forms of PWP. The majority of PWPs offer either food or cash in return for physical labour, and are known as food-for-work (FFW) or cash-for-work (CFW) programmes, respectively. Whether cash, food or other inputs are the most appropriate mode of payment varies according to the nature of the labour market shock which has created the need for the intervention. In situations where security is poor, food is not readily available, or food cost

inflation is high, food often remains the optimal form of payment (Basu, 1996)¹³. In some programmes the wage, in the form of food, is used as an incentive for communities to construct assets (food-for-assets or FFA), or to participate in training programmes, (food-for-training or FFT), expanding the concept of PWP still further. Recently, the WFP have adopted the terms Food for Assets (FFA), and Targeted Food Distribution for Assets (TFDA) to describe their PWP to indicate that food is being given to assist communities in producing assets that will be of economic value to them, in an attempt to move away from the beneficiary perception that the work requirement represents a form of conditionality which must be fulfilled in order to access food, irrespective of the quality or value of the asset created¹⁴ (McCord, 2005). Programmes using a food rather than cash wage tend to be implemented or supported by agencies such as WFP or USAID, which have historically had surplus food stocks at their disposal, but limited access to capital to fund conventional CFW initiatives (see McCord, 2005).¹⁵ Other PWPs offer alternative forms of payment, such as inputs-for-work (IFW), where the wage is paid in the form of agricultural inputs (fertilizers and seeds) as in the Malawian Government's Inputs for Assets (IFA) programme (UK DFID, 2004b).

The PWP concept is further complicated by the fact that the term 'workfare programme' is used synonymously with 'public works programme' in much World Bank literature (Subbarao, 2001:2; Vodopivec, 2004). This loose use of terminology is problematic given the specific labour market origins and policy objectives associated with the 'workfare' concept, and the fact that this represents only one possible component of the broader and pluralistic public works concept¹⁶. The range of variant PWP forms and nomenclature inconsistencies identified above contribute to the poorly conceptualised usage of the term PWP in both the literature and policy discourses, with the generic

¹³ NGOs in Ethiopia are conducting pilot programmes to test the relative impact of different forms of PWP remuneration, and beneficiary preferences. (Devereux et al., 2005)

¹⁴ The WFP present this approach as a 'soft' PWP, an intermediary step between the free (unconditional) food distributions provided by WFP in emergency contexts, and the cessation of food distributions once the crisis has abated, attempting to introduce a market element into the relationship between the beneficiary and the aid agency, in terms of the reciprocity of food receipt in return for work.

¹⁵ The 40% global grain price rise in 2007/8 severely reduced the operating grain surplus of both USAID and WFP, and so the incidence of such programmes in the future is likely to be limited.

¹⁶ Workfare is associated with the US active labour market policies initiated in the 1980s, and similar UK policies, known as 'welfare to work' which attempted to make unemployment benefit conditional on taking up work opportunities offered to the unemployed, thereby attempting to reduce frictional unemployment and in this way bring down unemployment and demand for social welfare support (McCord, 2007b).

term 'public works' tending to be used for a multitude of divergent programmes, diverse in terms of both design and objectives. This conceptual melee is acknowledged by Subbarao, who states that:

'There is much confusion about the meaning and scope of public works programs (also known as workfare programs) across countries.' (2001:2)

In terms of their position in the social protection lexicon, PWPs are sometimes considered a particular form of conditional transfer (see Samson, van Niekerk and Mac Quene (2006:8)), with the transfer being given in return for the fulfilment of the work requirement. This categorisation is not unproblematic, and it is argued in this paper that there are critical differences between PWPs and the more conventional forms of conditional and unconditional transfers which do not entail a work requirement, which have a significant impact on their respective social protection functions.

Notwithstanding these definitional problems, the core PWP concept implies a labour-oriented form of social protection instrument in which a wage is provided in return for labour, with the objective of providing a safety net at a time when regular wage employment or participation in normal livelihoods activities is disrupted, due to an economic, political or environmental shock, or in response to situations of chronic unemployment, resulting from structural shifts in the economy. At the most general level, PWPs tend to have as their primary objective the provision of some form of social protection for the poor who are not able to find work or pursue their normal livelihoods activities due to some form of disruption in the labour market. They are intended to provide a basic income and prevent the distress selling of assets in order to meet subsistence needs and frequently involve the creation or maintenance of potentially productive infrastructure, such as roads or irrigation systems, which are also intended to contribute to the livelihoods of participants. Depending on the nature of the crisis driving the implementation of a particular PWP, other objectives of greater or lesser importance may include skills development through work experience and on-the-job training, the stimulation of economic growth through the promotion of demand among PWP beneficiaries, and the maintenance of social and political order in the context of unacceptably high levels of unemployment and poverty. These objectives are explored in more detail below.

Programmes are usually self-targeted on the basis of the principal of 'less eligibility'. This concept implies that 'relief [social assistance] should be limited to an amount and administered in a manner which leaves the recipient worse off than the employed' (Barr, 1998:17). On this basis the value of the wage in a PWP is typically kept low in order to ensure that programme participation is only an

attractive option for the poor unemployed, and will not result in labour market distortion with workers being drawn out of other forms of low income employment. This is often achieved by setting the wage at or below the market wage, on the assumption that only the poor will self-select for PWP employment at this wage. When employment is offered to all those seeking work, or at least one member of all work-seeking households, the programme is known as ‘universal’. However, where the number of those seeking PWP employment exceeds the number of jobs available, access is rationed using a variety of mechanisms including targeting on the basis of demographic or geographical characteristics, the allocation of employment through lottery systems, and/or community-targeting, where employment is allocated by communities among themselves¹⁷.

The PWP wage (in cash or in kind) is usually given in return for a set amount of work. This is often defined in terms of the completion of a particular task (task-based employment) in order to avoid perverse incentives for workers to extend the time taken to complete a given task, thereby avoiding the potential efficiency trade-offs which could result from the adoption of a PWP mode of asset production.

2.2 History

PWPs have been implemented throughout the world for several centuries, with major programmes implemented in Britain and Prussia during periods of labour market disruption and heightened unemployment resulting from industrialisation and conflict; in the United States of America during the Great Depression in the 1930s; and in Africa, Latin America and Asia during the second half of the twentieth century (Subbarao *et al.*, 1997). In developing countries, PWPs have been used in response to both developmental and emergency crises, while in recent decades they have frequently formed a component of World Bank-supported Social Funds, often with developmental objectives relating to livelihoods and poverty reduction (for example MASAF in Malawi, and TASAF in Tanzania). In Africa programmes have tended to be short term and contingent on donor funding, while in Asia multilateral food-aid initiatives supported large-scale food-for-work programmes during the post-war decades. More recently many Asian programmes have shifted to cash-for-work and been implemented for prolonged periods, with primarily domestic funding (Korea, India) (*ibid*). While PWPs are generally not used as long term instruments to address poverty, there are cases in Asia where they perform this function, most notably the Indian MEGS, initiated during the 1960s

¹⁷ A range of potential targeting measures is discussed in detail in Coady *et al.* (2002). This issue is not explored further here.

and still in operation, and the recently introduced NREGP, also in India. These programmes address poverty by attempting to ensure sustained access to employment by the poor, thereby guaranteeing a minimum regular income, and in this way promoting income insecurity and reducing vulnerability.

Food-for-work (FFW) was particularly popular in the post-war period largely due to the major grain surpluses produced by the US, which, under Public Law 480 (PL480), were used to support FFW programmes around the world. PL480, also known as the Agricultural Trade Development and Assistance Act of 1954, or Food for Peace (FFP), is the US policy of using surplus production to supply the world's largest global food-aid programme, which in 2003 had a total value of US\$2 billion. However in recent decades, CFW has become increasingly popular, offering a more responsive and flexible option for beneficiaries, as cash can be used to meet a range of household needs directly, rather than requiring a process of household level monetisation which often entails losses in the net transfer value of the commodities provided as in-kind PWP payment. However, it is often donor institutional priorities, rather than beneficiary preferences, which dictate PWP payment modalities; agencies for whom food stocks comprise form a large component of their operating budget, still tend to promote in-kind payment. The World Food Programme and USAID still primarily support FFW based PWPs, with USAID utilising food drawn from the Food for Peace (FFP) allocation from US surplus agricultural production.

2.3 PWP Heterogeneity

As illustrated above, while PWPs share the core characteristics of employing labour for the creation of public goods¹⁸ (physical or social) at a prescribed wage for those unable to find alternative employment, with the objective of providing some form of social protection, there are many different kinds of PWP interventions. PWPs are not monolithic entities, but a conceptually varied

¹⁸ There are a small number of PWPs that provide private rather than public goods. Examples of these would be small-scale localised PWPs designed to assist HIV-affected community members through the creation of household level vegetable gardens in Zimbabwe (see McCord (2005)), or components of the Maharashtra Employment Guarantee Scheme (MEGS), which at times during its 40-year history has created private assets when it has not been possible to identify sufficiently labour-absorbing public assets for construction in a particular area. The recently introduced NREGP in India has explicitly extended its mandate to include the creation of private assets, as outlined by the Centre for Science and Environment: 'It is argued that though creating private assets goes against the objective of a public works programme, the poor quality of public assets, absence of community benefits, and lack of maintenance funds is bringing about a change in the profile and ownership of these assets. While it may prove (sic) the durability and benefits of assets created under the EGS, it has also raised concerns about the equitable distribution of EGS benefits. For instance, farm ponds are in great demand under EGS (sic) in Maharashtra, but these are privately owned assets and cost Rs 40,000, require (sic) more than one acre of land and hence benefit only the large farmers' (Centre for Science and Environment, n.d.:9).

form of intervention, which can vary in terms of duration, relationship to the labour market, scale, targeting and implementation modalities. This diversity is not explicitly recognised in the literature, and its implications are not adequately considered.

Two critical problems are linked to the failure to recognise the heterogeneity of PWP and the resultant loose use of terminology and conceptual confusion. The first is the discussion in the literature and at policy level of PWP as though it was a unitary concept, resulting in the mistaken attribution of the benefits arising from one form of PWP to other different types of programme within the genre.¹⁹ The second problem, which is a direct consequence of the first, is the inappropriate and widespread adoption of a particular form of PWP which has become the archetype in much of Sub-Saharan Africa. These issues are explored below.

The World Bank characterises PWP as a short-term instrument for responding to acute or transient shocks²⁰. This form of PWP has become common in the PWP discourse; providing a short-term episode of employment which reduces distress selling of assets, promoting consumption smoothing on a temporary basis during periods of disrupted access to income, particularly where the problem is covariate. In the context of such an acute labour market crisis, the World Bank argues that the use of a PWP instrument offering temporary employment may be appropriate in terms of cost and impact, particularly where the output of the programme is an asset which will reduce the vulnerability of the community to future shocks (see Subbarao *et al.* (1997) for a full discussion).

The kind of short-term PWP outlined above has, however, become synonymous with the term PWP in much of the current discourse, and is widely implemented in a range of contexts outside the specific 'acute shock' scenario where its efficacy has been identified by the World Bank and is consistent with conventional microeconomic theory. In the policy discourse, this form of short-term PWP has become the dominant 'ideal type' PWP, and the PWP of choice in much of sub-Saharan Africa, including South Africa, Malawi and Tanzania. It is selected in response to a range of labour market deficiencies and social protection challenges, without cognition of the fact that this represents only one particular PWP variant, which is appropriate in a limited set of circumstances, rather than being universally effective. If examined in light of limited empirical evidence and

¹⁹ For example, President Mbeki of South Africa mistakenly publicly attributed the benefits of an EGS-style long-term PWP (Zimbabwe) to the National Public Works Programme (EPWP), which offers only a single episode of short-term employment, in his address to the National Council of Provinces (2003).

²⁰ See, for example, the 2001 World Development Report (World Bank, 2001) and the World Bank Poverty Nets website (World Bank, 2004a).

economic theory, it is clear that this form of short-term PWP response is not appropriate in many of the contexts in which it is currently adopted.

In the literature it is argued that this archetypal form of PWP providing short-term employment functions as a response to acute or transient labour market disruption and this in itself is non-problematic. What is necessary to problematise is the identification of such PWPs as appropriate instruments in contexts which are not characterised by transient labour market disruption, on the basis of the assumption that a short-term PWP intervention can effectively address poverty, irrespective of the nature or cause of the labour market crisis. In the context of chronic poverty and labour market failure it is not evident that a short-term PWP intervention will have a significant or sustained impact (see McCord (2004a) with reference to South Africa). Subbarao *et al.* reflect this analysis, arguing on the basis of cross country experience, that:

‘... public works are essentially a temporary safety net and should never be used as a permanent escape route from poverty.’ (1997:168)

Subbarao *et al.*’s use of the generic term ‘public works’ to describe a specific form or subset of short-term PWPs illustrates the problem in the discourse, which entails the identification of short-term PWPs with the whole genre of PWPs. It could be argued that whether a PWP offers a temporary or permanent route out of poverty depends on the kind of PWP being implemented, and it is necessary to deconstruct the concept and clarify the characteristics of the PWP under discussion in order to promote an informed and useful debate. This entails challenging Subbarao *et al.*’s identification of all public works with *short-term* public works, and their argument that public works generically should not, *de facto*, be used to address chronic poverty. Interestingly, while the archetypal short-term PWP is not appropriate as a permanent escape route, as Subbarao *et al.* assert, this type of PWP is often mistakenly adopted, even, ironically, with Bank support, as in the case of the MASAF programme in Malawi. Other forms of PWP which offer prolonged or repeated access to PWP employment have been used successfully to provide ongoing poverty reduction, such as the MEGS in India.

The confusion of the archetype for the range of PWP types is problematic in terms of the social protection outcome, as PWPs offering a single short episode of employment are repeatedly prescribed by donors and governments in situations of chronic poverty, in the hope that they will provide the ‘permanent escape route’ that Subbarao himself argues is not an option. The policy documentation around such programmes repeatedly indicates that governments and donors

implementing these programmes anticipate that these programmes will have a significant social protection function, resulting in sustained improvements in livelihoods and poverty reduction²¹.

2.4 The PWP Problem

The key issue illustrated by the foregoing discussion is that conceptual confusion is leading to inappropriate policy choice, programme design errors, and unrealistic expectations on the part of implementers, with neither economic theory nor the (limited) evidence base supporting the adoption of short-term PWPs in many of the contexts in which they are currently being implemented. This is in part due to ideological factors which underlie donor and government preferences for market-based development solutions which can be achieved by a ‘treatment’ of the target group (Surender, 2007), and which render the archetypal PWP extremely popular (McCord, 2008).²²

Despite the dominance of the PWP archetype, particularly in sub-Saharan Africa, and Subbarao’s identification of this type with the whole genre, many widely differing programmes share the generic PWP nomenclature, while enjoying only a small area of shared identity, relating to social protection and employment. But at the same time, the term PWP is frequently adopted and used either generically or without adequate definition to ensure a common understanding of which particular form of PWP is under discussion. The core problem is the lack of a clear conceptual framework for a term itself which is highly heterogeneous in its manifestations. The lack of conceptual clarity and adoption of common terminology in the absence of a common understanding of the meaning of the terminology is highly problematic in the PWP academic and policy discourses, and exacerbates the challenge of appropriate policy choice.

Definitions which might assist in the clarification of the use of PWP terminology are absent in the current debate, which instead uses the term PWP as though it were homogenous, and the literature offers no typology of the different types of PWP. The purpose of this chapter is to attempt to define a typology of PWPs, and then to develop a schema of PWP objectives which may be applied to the typology, as even within a single form of PWP there may be a range of different objectives and relative priorities.

²¹ An example is the DFID-supported PWP in Malawi which has as its goal ‘enhanced livelihoods for poor people in Malawi’ (DFID UK, 2004).

²² The ideological dimensions of PWP selection are not explored further in this thesis, but the issue is explored in detail in McCord, 2008.

2.5 A PWP Typology

The variety of interventions falling under the broad concept of PWP range from large-scale national government employment schemes (GES), to more limited project-based or geographically specific interventions responding to transient labour market problems. However, in the current discourse there has been no attempt to establish any form of codification of this diversity, and there is no typology to facilitate more meaningful analysis or disaggregation of the generic term ‘PWP’. A review of the international literature and over 200 separate programmes was carried out in order to identify discrete forms of PWP on the basis of core features relating to design and primary objectives. The result is a typology of PWP which groups programmes into four broad types. These types share a common PWP identity in terms of the provision of employment with some form of social protection objective, but within this common framework, adopt different realisations of the basic public works concept. The two dominant types of PWP are: those offering short-term employment, and large-scale government employment programmes offering some form of employment guarantee. The two less frequent, but still identifiable types are: those promoting labour intensification of government infrastructure spending, and programmes which enhance supply-side characteristics, promoting ‘employability’. It is important to note that while some programmes may include aspects of more than one of these types, which are not necessarily mutually exclusive, all PWPs tend to have a primary identity which enables them to be located in one of the four categories. This typology is applied to the current PWP discourse in this thesis in order to illuminate, and attempt to clarify the current conceptual confusion. For the sake of brevity the four types of programme identified above have been called types A, B, C and D, and they are summarised in box 2.1 below.

Box 2.1: PWP Typology

Type A

PWPs offering a single short-term episode of employment

Type B

Large-scale government employment programmes which may offer some form of employment guarantee

Type C

Programmes promoting the labour intensification of government infrastructure spending

Type D

Programmes which enhance employability

Brief descriptions of each type, together with examples are set out below.

Type A: Short-term Employment

PWPs offering short-term employment are typically implemented as a response to some form of temporary labour market or livelihoods disruption, which may result from environmental (e.g. drought, flood or hurricane) or economic shocks, such as the East Asian financial crisis, or occur during the annual 'hungry season', particularly in Africa. They are mostly, although not exclusively, implemented in the infrastructure sector, and the intention is to temporarily increase aggregate employment, while providing a basic income for consumption smoothing during a temporary period of elevated unemployment or livelihoods disturbance. These programmes tend to offer basic 'risk coping' or 'protective' forms of social protection (see chapter three). In these programmes, the social protection transfer objective dominates objectives relating to the provision of assets, which may in many instances be essentially a 'make-work' activity, selected in order to satisfy the work conditionality.

Such programmes are frequently implemented in Bangladesh and other Southern Asian states in response to climatic shocks, and in Africa as a response to the seasonal food insecurity and underemployment which occurs during the annual 'hungry season', prior to the main harvest. Indonesia's Padat Karya (PK) programme is an example of a Type A programme, developed in response to an economic shock (Vaidya and Abedin, 2007). These programmes have come to be seen as archetypal PWPs in many situations, synonymous with the generic term PWP, and are typical of PWPs currently implemented in many sub-Saharan African countries (such as South Africa, Malawi, and Tanzania). The labour market function of such short term programmes is not always clear in contexts where the labour market challenge is not one of temporary disruption but rather of structural chronic low labour demand, an issue which will be discussed in more detail in the chapters which follow.

Type B: Government Employment Schemes/Employment Guarantee Programmes

Large-scale government employment programmes (GEPs) are a response to chronic or sustained levels of elevated unemployment, and entail significant increases in government expenditure on directly employing those who would otherwise be unemployed, as an 'employer of last resort' (ELR), with the objective of promoting aggregate employment on a sustained basis. Employment may be created in any sector, and may be provided either directly by government, or indirectly through private sector employers or civil society. The US New Deal programmes of the 1930s typify this approach. The objective of these programmes was the creation of productive employment in order

to promote both macroeconomic development (increasing aggregate employment and stimulating the economy), and social protection outcomes. A subset of GEPs, wherein the state guarantees ongoing or repeated episodes of employment on demand to those who are eligible, are known as Employment Guarantee Schemes (EGSs). An example is the NREGP in India. These programmes provide a form of non-contributory income insurance through guaranteed employment for all who seek it.

The US response to the Great Depression in the 1930s exemplifies a classic public sector employment programme. Under the programme, massive state expenditure on PWP was initiated, at their height absorbing up to 50% of the unemployed in an attempt to stimulate consumer demand and prevent the deepening of the economic recession (Harvey, 2007a). These programmes take the form of EGSs in some countries, wherein employment is guaranteed to all members of eligible groups on demand. Such programmes are currently operational in several states in India, for example, the MEGS (see Dev (1995)), as well as nationally under the recently launched NREGP (India, Department of Rural Development, 2007). In the Indian context, employment is defined as a constitutional right and the state offers a guaranteed number of days of employment each year to one unemployed work seeker from any rural household seeking employment. The worker will be employed for a maximum of 100 days each year on the creation of community assets and paid at the minimum wage. A similarly large-scale programme, initiated in 2006, is being implemented in Ethiopia in response to the disruption of livelihoods which occurs annually as the result of persistent drought (the Productive Safety Nets Programme or PSNP), although the extent to which employment can be offered to all seeking it in this case is constrained in practice, particularly in years of serious drought, as a cap on total employment supply has been set as part of the project design.²³ Hence while the PSNP is a large scale government employment scheme, the cap means that it does not function as an employment guarantee programme, and employment is severely rationed with access determined by administrative selection rather than demand.

The definition of ‘universal’ is variously applied both in PWP design and in the literature, and access may be rationed even within nominally ‘universal’ programmes, or Employment Guarantee Schemes (EGSs). Examples of large-scale programmes which have attempted to provide some form of

²³ As an illustration of the scale of demand for PWP employment in Ethiopia, the precursor to the PSNP offered temporary work to up to 1.4 million people in drought-affected communities each year between 1999 and 2003 (see Subbarao and Smith (2003)).

universal coverage in order to meet explicit social protection objectives are the US New Deal, the Jefes programme in Argentina, the Ethiopian PSNP, and the Indian NREGP²⁴. The most generous definition of universal access would demand the provision of employment for all unemployed workers, but this is typically mediated by the adoption of criteria limiting eligibility based on considerations such as poverty (as in the New Deal), spatial location of workers (as in NREGA, which is open only to the rural unemployed), or some form of household rationing, such as offering one job per household (NREGP and Jefes)²⁵. The Jefes programme had two additional criteria: a demographic condition limiting participation to heads of households with children or disabled or pregnant spouses, and an exclusion relating to those receiving unemployment insurance or transfer benefits from the government²⁶. In many EGSs attempts have been made to limit ‘demand’ for PWP employment in this way by adopting criteria limiting eligibility. Interestingly, among the EGSs discussed above, only the Jefes programme adopted a low wage to promote self-targeting by the poorest (the dominant form of rationing access to PWPs generally), while in the other programmes the work requirement alone was the primary targeting mechanism (McCord, 2007b), and wages were deliberately set at the minimum wage, reflecting an explicit concern among programme designers that the value of the labour of PWP participants should not be discounted relative to other labour market participants (Harvey, 2007a). This ethical concern is not evident in the discourse around the other types of PWP, where discounting the value of labour of PWP participants relative to others is central to programme design, and not identified in the literature as problematic.

The problem of rationed access even under ‘universal’ EGSs is exacerbated by the frequent inability of the state, or its agents, to provide sufficient PWP work for all those eligible, due to issues of state capacity (programme design, technical supervision, execution, etc.), further worsening the rationing problem, even among those who are eligible. Interestingly, this problem is accommodated in a number of programmes which offer(ed) a commitment to the provision of a universal minimum income transfer for the poor, as a backup, should the state not be able to offer adequate employment for all the eligible seeking it within the programme. Recognising that state failure to provide adequate

²⁴ The extent to which such programmes succeed in realising their ‘universal’ aspirations, however defined, varies considerably for many reasons including constrained budgets, institutional weaknesses, capacity constraints and corruption.

²⁵ In the PSNP more than one member can work, but collectively, household members are only permitted to work a total of 22 days, thereby earning a total of one month’s wage per household.

²⁶ Interestingly a companion programme, the Programa de Emergencia Laboral (PEL), offering similar benefits, was implemented for unemployed adults who did not meet the demographic criterion for Jefes participation.

employment risks undermining PWP's mass employment and thereby also social protection objectives, PWP's facing these constraints (such as the NREGP, PSNP) have been designed and implemented in such a way that, irrespective of whether it is possible to supply adequate PWP employment or not, the programme default is the provision of an ongoing (or repeated) cash transfer to those eligible, if they are not provided with PWP employment, in the form of an income support 'back-up' or unemployment insurance.²⁷ In the case of the New Deal's employment programmes, those who could not be accommodated in PWP's, or whose earnings in public or private employment were insufficient to meet their basic needs, could apply to local relief agencies for public assistance. In this way the need for an income guarantee to back up the government's job creation efforts was recognised.²⁸ Hence, in these cases, provision of an ongoing transfer is not dependent on the capacity of the state to deliver employment; a fundamental difference from programmes where state capacity to deliver is the binding constraint on PWP scale, as in the case of the South African EPWP. The centrality of capacity constraints in determining the successful performance of PWP has also been identified by Subbarao, who conceded that:

'The main constraint in implementing public works programs in much of Africa is the lack of capacity.' (2001:viii)

Type C: Labour Intensification

The primary objective of this type of PWP is the construction of assets while increasing aggregate labour usage. These programmes are almost exclusively initiated in the infrastructure sector, and adopt labour-based techniques in order to promote the absorption of increased amounts of labour for each unit of asset constructed. The work of the Ethiopian Rural Roads Authority (ERRA), the AGETIP (Agence d'Exécution des Travaux d'Intérêt Public contre le sous-emploi) in Senegal, related AFRICATIP-supported programmes in Western Africa, and the ILO's Employment-Intensive Investment Programmes (EIIPs) which promote the use of labour-based techniques in the infrastructure sector are typical of this type of intervention.²⁹ In such programmes the social

²⁷ In the case of NREGP, the primary function of the 'back-up' unemployment insurance guarantee is to provide an incentive for local government to offer sufficient employment, since they are obliged to pay the unemployment insurance from their own resources, while PWP wages are funded by central government. However, this approach also has the implicit function of protecting workers from the inability of local government to provide adequate employment.

²⁸ Harvey, 2007, pers. comm.

²⁹ The Chinese Yigong-daizhen programme is similarly constituted (see Devereux and Solomon (2006:23)), although in this case, the objective of simultaneously providing infrastructure and employment coexists with a major forced labour component, which is in tension with the definition of PWP's adopted above, in terms of the provision of

protection benefits are assumed to result from the increase in aggregate levels of employment generated during the creation of assets, and to accrue to workers as a direct outcome of employment provided, and possibly also indirectly as a result of the productive value of assets created, although recent work carried out by the ILO in Ethiopia using the newly developed Rapid Assessment of Poverty Impacts (RAPI) methodology indicates that it may not be possible to identify sustained benefits resulting from the assets created (Osei-Bonsu and Mengesha, 2007). While these programmes are primarily aimed at infrastructure provision, they also confer basic short-term ‘risk coping’ or ‘protective’ social protection benefits, through the wage, which terminate at the point of programme completion. Such programmes also frequently entail the promotion of small contractor development, in order to establish a cadre of entrepreneurs able to manage infrastructure provision contracts in a labour-intensive way.

Type D: The Promotion of Employability

Finally there is a PWP approach which focuses on addressing supply-side constraints to employment, and promoting the ‘employability’ of workers, by promoting workplace experience and skills formation among the unemployed. Such programmes are implemented when the key constraint to employment is lack of skills rather than lack of employment opportunities *per se*. These programmes have primarily been adopted in Organisation of Economic Cooperation and Development (OECD) countries, at times of frictional unemployment, i.e. when the fundamental problem has been skills shortages in the labour pool. This type of programme assumes that sufficient numbers of jobs are available for the unemployed if they are adequately retrained and supported, and is associated with a political concern to encourage the unemployed to take up available work opportunities rather than to provide them with unemployment benefits. This approach is typified by the US set of ‘workfare’ programmes and the UK ‘Welfare to Work’ initiative of the 1990s, which make the provision of social protection benefits for the working age poor unemployed conditional on participants taking up low-paid work or participating in work experience or training programmes. This approach will only confer social sustained protection benefits and promote aggregate employment if the underlying assumption – that sufficient employment is available to absorb a significant number of the unemployed if they acquire additional skills and experience – holds true.

remunerated PWP employment in order to promote social protection outcomes. In this respect, such a programme may fall into separate category of interventions, along with forced labour programmes in Burma, and so is not included in this typology.

Otherwise, such initiatives are likely to result in worker substitution, rather than significant increases in aggregate employment.

Programmes to enhance employability by addressing supply-side problems are primarily found in OECD countries, as part of broader Active Labour Market Policies (ALMP) (see Martin and Grubb (2001)) designed to enhance skills and offer incentives for re-entry into employment. The success of such programmes is contingent on the ability of the programme a) to successfully transfer skills to participants, and b) to transfer skills which match skills in demand in the economy. This approach is also contingent on the labour market context being characterised by frictional rather than structural unemployment, and the existence of significant numbers of appropriate unfilled job opportunities in the labour market. The feasibility of such approaches has been questioned in the literature (*ibid*), as has its appropriateness in the context of developing countries facing structural rather than frictional unemployment (Karuri *et al.*, 2007). This issue is discussed in detail in chapter seven.

2.6 A Schema of PWP Objectives

Establishing a PWP typology brings some conceptual clarification to the PWP discourse. However, there is a need to go beyond PWP form to look at PWP objectives in more detail, an area which is also neglected in the literature, and remains conceptually confused. A review of international evidence suggests that a wide range of objectives are associated with PWPs, and a single programme may include a diversity of objectives. While particular objectives are associated with certain forms of PWP (for example, type D PWPs have as a key objective skills development), different PWP types are not necessarily or exclusively linked with particular objectives, and most programmes have a range of associated objectives, which may be variously prioritised.

The relative balance of objectives in a PWP can result in significant differences in programme design and social protection outcomes. Lack of clarity on the relative importance of objectives within a PWP with multiple, potentially competing or contradictory objectives has been identified as the cause of PWP failure in a number of cases (see Adato *et al.* (1999), with reference to the South African CBPWP, McCord (2007b), regarding the South African EPWP; and Curtain (1999), regarding the PK in Indonesia).

Drawing on the international reviews of PWP objectives set out in McCord (2005, 2007b), it is proposed that the objectives typically found in PWPs can be grouped into six broad categories, providing a conceptual schema for future PWP analysis. These objective categories, representing sets of related sub-objectives (referred to in the following text as ‘objective sets’), reflect PWP objectives

as set out in programme documentation, representing the range of different aspirations and intentions associated with PWP implementation, and are illustrative of the confusion of ultimate and instrumental objectives in the current discourse. As a result the objective sets are not wholly discrete, with some being instrumental, or proximate objectives necessary to achieving other, ultimate objectives (for example skills development as a means to reduce frictional unemployment) and some focusing on micro level impacts while others focus on the macro-economic consequences in the aggregate. Notwithstanding the issue of inter-relatedness, the explicit identification of the range of PWP objectives is useful both in terms of attempting to disaggregate the PWP concept, and also in terms of providing a basis on which to assess PWP performance (see discussion in chapter 4). The six objective sets are: i) social protection (most frequently articulated as ‘poverty alleviation’), ii) employment, iii) skills development, iv) asset or service provision, v) macroeconomic stimulation, and vi) political stabilisation. Within each of these objective sets, detailed objectives are identified. The most commonly articulated PWP objective is poverty alleviation. The remaining five objective sets are instrumental in terms of their relationship to social protection outcomes, contributing indirectly to this objective, either intentionally or through positive externalities, while also addressing a range of other policy concerns directly (enhancing labour demand, promoting supply-side improvements through skills development, improving service provision, macroeconomic stimulation, and political stabilisation). This analysis clarifies the fact that PWPs can have both direct and indirect social protection objectives simultaneously, unlike other social protection instruments such as cash grants which tend to focus exclusively on direct social protection benefits through a cash transfer. The six broad categories of objectives are summarised in Table 2.1 and each is discussed critically below.

Table 2.1: International Overview of PWP Objectives

Objective	Detail/Sub-Objectives
Social Protection	Income relief through temporary employment
	Income relief through ongoing/repeated employment
	Improved livelihoods after exiting
Employment	Alleviate unemployment by creating short-term work opportunities
	Reduce frictional unemployment by increasing the capacity of those exiting PWP to take up existing unfilled work opportunities
	Increase aggregate demand for labour through labour intensification
	SMME development in the construction sector (change structure of demand for labour in the construction sector in order to facilitate greater labour intensification) (instrumental)
	Increased government expenditure – Government Employment Schemes (GES)
Skills Development	Skills training and work experience increase capacity of participants to earn an income after exiting (instrumental, directly contributes to 1.3 above)
Physical and Social Infrastructure Provision	Improve provision of basic physical infrastructure and physical services (road construction and maintenance, school construction, dam creation, irrigation, etc.)
	Improve social infrastructure through service delivery (e.g. Home Based Care (HBC), pre-school facilities)
Macroeconomic Stimulation	Introduce sufficient capital into economy to have stimulate demand on a regional or national level
Political Stabilisation	Provision of visible government response to unemployment or poverty crisis.

The Social Protection Objective

The objective of social protection, which is often expressed as poverty alleviation, is explicitly articulated in most PWPs. Typically, social protection is the primary objective of a programme, reflecting its core rationale, as in the case of type A and B programmes. However, not all programmes explicitly include social protection as an objective, and for some the stated objectives are intermediate or proximate ones, such as ‘job creation’, with the ultimate social protection outcome of job creation remaining implicit. In other cases, PWPs are primarily oriented to service provision, and in such cases the social protection objective is subordinate to objectives of asset or service delivery, and is perceived as a secondary benefit resulting from a core service delivery function, as in the case of type C programmes.

The relationship between the various objective sets and social protection is often not well articulated in the literature or programme design, with causal linkages between the achievement of the proximate objectives and some form of meaningful social protection outcome often being assumed as axiomatic, rather than empirically demonstrated. Also, the frequently observed mismatch between programme type and programme objectives implies that there is an assumption that any of the four types of PWP identified above can successfully deliver on any of the objective sets, irrespective of the design factors limiting the potential of each type of PWP intervention. For example, as discussed above, it is frequently assumed that type A (short-term) programmes can be successfully linked to the realisation of social protection objective sets in situations of chronic poverty, despite the fact that the design of such a programme is inherently inappropriate for delivering sustained social protection outcomes in any context other than one characterised by a short-term labour market disruption. The linkage between programme type and objective is particularly problematic in relation to social protection, where the assumption that any form of employment provision will lead to meaningful, as opposed to extremely transient, social protection gains, tends to dominate the discourse, and where theoretical and empirical analysis is particularly scarce. The work of Ravallion, Datt and Subbarao approaches this question, but focuses almost exclusively on long-term (type B) programmes, or type A

programmes in emergency situations, rather than addressing the problem of social protection impacts of type A programmes in chronic contexts. Recent work drawing on material from Bangladesh, Malawi, South Africa and Ethiopia (Helen Keller International, 2007; McCord, 2003; Chirwa *et al.*, 2004a, and Osei-Bonsu and Mengesha, 2007) shows significant cause for concern in terms of the inappropriate social protection objectives ascribed to type A and type C PWPs in particular. The key problem here is the association of particular social protection objectives with the incorrect type of PWP, and the resulting poor fit between PWP form and function.

When PWP objectives include some form of sustained social protection, adequate wage rates and/or prolonged employment duration are required to promote accumulation, since the poor use income to satisfy basic consumption needs first, then invest in human capital (education and health) and social capital, and only then invest in activities to promote livelihoods. Hence, a PWP is only likely to impact on productive investment and an improvement in livelihoods which will be sustained after the period of programme implementation if it provides more than the income required to ensure that basic consumption needs are satisfied (Devereux, 2000). Even when wage income is limited in comparison with household needs however, PWP can have a significant impact by providing a form of income insurance, although a programme can only serve this function if the public works employment is available on a sustained basis, guaranteeing ongoing income flows through employment as required. Evidence from India indicates that this insurance function may be of greater significance than the value of the transfer in terms of sustained poverty reduction, since it reduces income fluctuation and thereby prevents acute distress to the poor (Dev, 1995). Three different sub-objectives relating to social protection provision have been identified in the literature, and are set out below.

Income relief through temporary employment

From a theoretical perspective, income relief through temporary employment is appropriate in contexts where the problem of poverty and/or unemployment is determined by some external shock (such as conflict, drought, floods, economic crisis or recession) and is essentially a short-term disruption to the labour market, as in the Indonesian PK

programme, which was implemented in response to the 1997/8 Asian financial crisis. This is the case in many PWPs where an explicit poverty alleviation goal is linked to a short-term episode of employment provided in the context of a temporary labour market crisis.

The provision of such an episode of short-term employment in the context of structural unemployment, when the labour market itself is not expected to provide large-scale employment in the short to medium term, is problematic, but occurs frequently (South Africa, Malawi, Tanzania) (see discussion in McCord (2007b)) and is scarcely questioned in the international literature (with the notable exception of Devereux and Solomon (2006) who mention this issue in relation to evidence from Zambia of the limited impact of short-term PWP employment). It is interesting to note the lack of discussion of the limitations of such programmes in these contexts, and the fact that implementation of such programmes occurs relatively frequently in low-income countries in sub-Saharan Africa, despite being a seemingly inappropriate instrument in the context of structural unemployment, when the need is for interventions offering sustained benefits.

Income relief through ongoing or repeated employment

If a PWP approach to social protection is selected in the context of structural or chronic unemployment, or contexts with regularly repeated episodes of un-/underemployment and poverty, as currently experienced in many developing countries, particularly those in southern Africa, then the appropriate form of intervention would be the provision of some form of long-term employment through government employment programmes (GEPs) or EGSs, rather than the brief episode of employment provided under many PWPs. It is interesting to note that the inappropriateness of the provision of once-off short-term episodes of employment in this context is widely recognised in the literature; see, for example, the World Bank's 2001 World Development Report (World Bank, 2001), where it is explicitly argued that offering short-term PWP employment in the context of chronic unemployment is not likely to offer a sustained reduction in poverty. Rather than proposing some form of sustained PWP, such as GEP or EGS, the Bank argues that alternative forms of intervention offering long-term assistance, such as cash grants, may be more appropriate (*ibid*).

Improved livelihood as a result of accumulation during PWP participation

Many PWPs anticipate producing a sustained reduction of poverty by increasing the capacity of participants to earn an income after exiting. This could be achieved by promoting i) financial accumulation (through wages), ii) the accumulation of productive assets (through savings), (this could also be positively affected by the provision of productive assets as an output of the PWP itself and) iii) through the accumulation of human capital (through skills development and experience) during programme participation. If these forms of accumulation were adequate to improve livelihoods, then this sub-objective would be met. While financial and physical asset accumulation are not conceptually problematic, the assumed livelihoods value of improvements in supply-side characteristics is not conceptually robust in all labour market contexts: whether a given intervention will increase the 'employability' of participants is conditional on the availability of sufficient jobs (see, for example Meth (2008b)). This limitation is discussed further below in relation to the skills development objective, and is explored in detail in chapter seven

The Employment Objective

PWPs seek to address employment in four ways, three of which are direct and one indirect: i) the provision of temporary jobs, ii) reducing frictional unemployment through enhancing the quality of labour supply, iii) increasing aggregate demand by shifting the relative factor intensity of infrastructure provision through labour intensification and the promotion of SMMEs, and iv) increasing public sector employment. Each is briefly outlined below.

Provision of Temporary Jobs

As discussed above, the provision of temporary employment tends to characterise PWPs which are implemented during a period of temporary labour market disruption, which is expected to normalise in the short to medium term. An example of this is the provision of a short episode of employment in the Indonesian PK programme which was a response to a particular and acute (short-term) labour market shock which created a short-term spike in unemployment (Vaidya and Abedin, 2007).

Reducing Frictional Unemployment through Labour Supply Improvements

The temporary nature of the employment offered under many type A, C and D PWPs in situations of chronic rather than acute elevated unemployment may be understood in terms of their objectives of providing ‘spill-over benefits’ (work experience and training), rather than being intended to make a significant contribution to aggregate employment or poverty relief *per se*.³⁰ In this way, in addition to the provision of a temporary cash wage which provides immediate and temporary assistance to participants, the purpose of the temporary jobs is explicitly to offer training and work experience to the unemployed in order to improve their labour market performance once they have exited the programme, this is linked to the skills development objective outlined below.

In programmes intended to reduce frictional unemployment the objective is to improve the quality of labour supply, so that workers will be able to take up *unfilled jobs already existing in the economy*. This approach tends to characterise PWP interventions which form one component of active labour market policies in OECD countries, where the objective is the reduction of unemployment which is primarily ‘frictional’, i.e. unemployment that results from a mismatch between the skills available in the labour force and those required by the economy, which can be addressed by the provision of relevant skills and experience to improve the quality of labour supply (Martin and Grubb, 2001). However, this approach is based on the premise that there are sufficient existing work opportunities to absorb the unemployed, which they will be able to take up if they are given training and work experience through PWP employment, or other forms of labour market assistance. This is not the case in many sub-Saharan African countries, where the number of unfilled job vacancies existing in the economy resulting from skills shortages is often marginal in relation to the scale of unemployment (see, for example, Kraak (2003)). The potential impact of a supply-side improvement approach to employment in PWPs offering short term employment is further constrained by the necessarily short duration of training, which limits the opportunity for adequate levels of skills transfers, and sometimes also by the poor quality

³⁰ An example of a programme with such an objective is the South African EPWP.

of training provided (see Karuri *et al.* (2007)). Where workers do subsequently achieve employment as a result of the limited training received, this often results in the displacement of other low-skilled workers, rather than net increases in aggregate employment.

The effectiveness of this approach even within OECD countries has been seriously challenged in recent years, and its appropriateness outside the OECD, in contexts where unemployment is not frictional, but structural, is questionable.

Increasing Aggregate Demand through Labour Intensification

Increasing aggregate demand for labour through labour intensification and/or increased government expenditure is central to many PWPs, which are founded on an attempt to close an economy's job gap through direct state intervention when market-based employment demand is inadequate, in terms of providing adequate livelihoods for a large segment of the population.

Attempts to increase aggregate demand for labour through the labour intensification of production are widespread, and relate primarily to the provision of physical infrastructure, as exemplified by the ILO Employment Intensive Investment Programme (EIIP) model, and AGETIP in Senegal. Such programmes do not necessarily require additional funding, but rather a shift in the factor intensity of existing expenditure to increase employment.

Despite the widespread implementation of labour intensification programmes, many of which are promoted by the ILO through its EIIP, labour intensification (LI) has not been extensively mainstreamed internationally, and remains a marginal component of infrastructure provision in most contexts. In South Africa for example although LI forms a major rhetorical component of the state's strategy to 'accelerate and share' growth (South Africa, The Presidency, 2006), only a limited proportion of infrastructure expenditure suitable for labour intensification adopts LI approaches, and this is explicitly recognised as an area where the national PWP has failed to meet its objectives (DoPW, 2007). In South Africa, as elsewhere, this is largely due to lack of buy-in to LI approaches within the mainstream construction industry (Mabilo, 2003 cited in McCord (2003); McDermott, 2006

cited in McCord (2006a)). As a consequence, the potential for expansion of aggregate employment in construction remains largely unrealised internationally.

In PWP with this type of objective, the focus is on the macroeconomic impact, in terms of an aggregate expansion of the labour market, rather than the social protection impact on individuals, and so analysis tends to be limited to the proximate outcome (job creation) rather than the ultimate outcome, in terms of the impact of such employment on social protection. The social protection outcome of such an intervention is highly contingent on programme design features which determine the nature of the work provided (duration, wage level, etc.), and also the socio-economic characteristics of those able to access the additional employment generated.

SMME Development in the Construction Sector

The objective of labour intensification is often associated with a broader attempt to change the structure of demand for labour in the construction sector, as in the case of the Community Based Public Works Programme (CBPWP) in South Africa and the AGETIP in Senegal (Wade, 2004). However, in order for such a transformation to be achieved, the development of a cadre of contractors familiar with LI approaches is required, and hence the development of SMMEs with the capacity to implement a Labour-Based Infrastructure Programme (LBIP) in the construction sector is sometimes an instrumental objective within PWPs. This approach entails investment in the promotion of construction and maintenance-oriented SMMEs which are expected to utilise more labour-intensive approaches than larger enterprises (CIDB, 2008). SMME creation was a major component of the AGETIP programme, which recognised that the creation of a cadre of SMMEs was both an end in itself and also a necessary prerequisite if a large-scale shift to LI was to take place (McCord, 2007b). Interestingly, however, there is no evidence of the robustness of this assumption, and the impact of promoting SMME engagement in PWP may be one of worker substitution (which may or may not itself be a deliberate policy objective) rather than the creation of new jobs, particularly in situations where labour intensity is already high, and existing personnel are made redundant in favour of PWP workers employed by SMMEs) (see, for example,

McCord (2004a, 2006a), with reference to the Gundo Lashu Programme in Limpopo, and the Western Cape EPWP).

Government Employment Programmes

Increasing aggregate employment through increased government expenditure is one of the most conventional forms of employment creation, and has been adopted in a wide range of contexts, with the most well known historical example being the New Deal programmes in the USA in the 1930s, which was mirrored by the employment programmes for 'poor whites' in South Africa during the same period (Abedian and Standish, 1986). Recent examples include the massive MEGS and NREGP in India, and the Argentinian Jefes programme (Harvey, 2007b). In these programmes, employment may be directly provided by the government, or through the private or NGO sectors on the basis of an expansion of government funding to increase employment in labour-intensive activities.

PWPs with this objective are dependent on significant additional public expenditure, which may be funded for example through deficit funding, as in the New Deal, or additional off-budget donor funds, to pay for the creation of additional jobs, as in the case of the PSNP. Without a significant fiscal allocation, the aggregate increase in employment from a GEP is likely to be marginal, as illustrated by the EPWP in South Africa, which is implemented without an additional budgetary allocations, and whose impact on aggregate employment is extremely limited, providing only 80,000 person years of work per annum (South Africa Department of Public Works, 2007) in the context of unemployment levels of four to eight million.

The adoption of a government employment programme (GEP) to meet the objective of increasing aggregate employment is ideologically in tension with the public sector restructuring and downsizing carried out by many MIC and LIC in recent decades, and renders the explicit implementation of such an approach problematic in many contexts, particularly where governments are concerned to avoid identification as populist.

Skills Development Objective

The objective of skills training and work experience to increase the capacity of participants to earn an income after exiting is essentially an instrumental objective, directly contributing to the reduction of frictional unemployment objective outlined above. Linked to the 'employability' aspect of the poverty alleviation objective above, this objective seeks to provide skills training and work experience through PWP employment, in order to increase the capacity of participants to earn an income after exiting the programme. This human capital approach is central to many OECD PWPs, and has been highly influential in the active labour market policy (ALMP) discourse in recent decades, primarily in developed countries, but also, to a lesser degree in middle and low income countries (MICs and LICs). This approach has been found to have only a limited impact, and to improve the subsequent labour market performance of participants only if the training provided is closely aligned to the specific skills gaps identified in the wider economy (Martin and Grubb, 2001). Based on their review of international experience, Martin and Grubb argue that where training is included in programmes it should be kept small in scale, and 'well targeted to the specific needs of both job seekers and local employers' (*ibid.*33). The South African EPWP is illustrative of a programme which does not conform with these guidelines, offering training which is not closely allied with the skills shortages identified in South Africa which are primarily for semi-skilled, artisanal and skilled workers, a shortcoming which is a direct consequence of the limited training contact time possible during the brief period of EPWP employment.³¹ This limitation is significant, since it has been recognised in the South African policy discourse that PWP employment without skills development will not have a sustained beneficial impact, see, for example, EPWP documentation citing the 2004 Growth and Development Summit:

³¹ This is explicitly acknowledged in the Infrastructure Sector Plan for the EPWP, 2005, which states 'the nature of the labour-intensive construction industry is such that [...] employment opportunities for labourers typically last only four to six months. [...], this entitles labourers to only eight to 12 days of paid training. This is not sufficient for train unskilled labourers to become artisans' (EPWP, 2005a).

‘...job creation without skills development, upgrading and training, does not lend itself to sustainable employment and will have no long-term economic impact on the lives of the unemployed...’ (EPWP, 2004)

This insight from the EPWP provides a general critique of the limited training potential offered by short term PWPs. Within the Ethiopian PSNP and the MASAF Improving Livelihoods through Public Works (ILTPWP) programme, this problem is addressed through complementary training programmes such as agricultural livelihood-promotion activities and small business training, which are external to the PWP itself, and so are not constrained by the operational rigidities of the PWP, in terms of duration, management, or content (McCord, 2007b). These programmes aim to promote livelihoods through self-employment, often at a survivalist level, rather than formal employment, in order to facilitate ‘graduation’ from PWP dependence after a limited period of PWP support. The idea of ‘graduation’ upon exit from type A PWPs is prevalent in the programme design documentation, and is central to the conceptualisation of the EPWP in South Africa, the Malawi MASAF PWPs, and the Ethiopian PSNP. However, there is no empirical evidence in the literature to support this aspiration and the little evidence which is available seems to suggest that most PWP participants return to the employment and poverty *status quo ante* once they exit PWP employment (Sultan and Slater, 2005; Ndoto and Macun, 2005).

It is interesting to note that skills development is not typically a component of the programmes offering employment guarantees in the context of chronic unemployment. The NREGP does not include a skills development component but focuses on the ongoing provision of PWP employment in order to guarantee an income. Community development, skills training and livelihood-related interventions are carried out in association with the PWP, but not in the expectation that participation in these activities will reduce future vulnerability to the extent that they will obviate the need for ongoing PWP support. In contrast, the Jefes and New Deal programmes both contained training and retraining components, but there were critical implementation differences – contact time with participants was not limited to an average of four to six months (entailing a total of eight to 12 days’ training contact time under the EPWP), and training was linked to skills demanded in the range of PWP programmes, which was far more diverse than the EPWP-based

employment. The capacity of both Jefes and New Deal to train and absorb reskilled workers was significantly higher than is the case within the EPWP, given the significant capacity constraints facing EPWP programme designers and managers, which would inhibit the potential for the EPWP to employ a wider range of EPWP-trained workers. Also, it is interesting to note that the training within Jefes was intended to promote the ability of participants to engage in the open labour market as the economic recession lifted (Harvey, 2007b). This prospect of imminent economic recovery is not relevant in many contexts where the labour market problem is structural rather than cyclical, particularly in sub-Saharan Africa.

Physical and Social Infrastructure Provision Objective

There are two main forms of infrastructure which may be provided through PWP: physical infrastructure, the conventional approach, and social infrastructure, each is discussed below.

Improve Provision of Basic Physical Infrastructure

In much of the literature, the service provision function of PWPs is their unique selling point, rendering them preferable to alternative forms of social protection. This is well articulated in relation to physical asset provision by the ILO:

‘Employment-intensive investment approaches present an opportunity through which the two challenges [employment and infrastructure] can be addressed simultaneously’ (Amri-Makhetha, *op cit*).

In accordance with this vision infrastructure provision (primarily road construction) is the primary objective in PWPs supported by the ILO’s Employment Intensive Investment Programme (EIIP) (ILO, 2004), and achieving the objective in a labour-intensive way is the recommended approach in order to increase aggregate employment. Similarly, in Rwanda PWPs have been identified as a means to promote the provision of productive assets (Mellor, 2003), and also in countries recovering from conflict and requiring infrastructure reconstruction, such as Serbia, Iraq and Afghanistan (see, for example, Bonin and Rinne (2006)).

However, internationally, PWPs differ significantly in terms of the relative emphasis given to the objective of infrastructure provision, even in instances when asset creation is nominally a key objective. In such programmes, the construction of physical assets is sometimes merely a way to satisfy the ‘work’ conditionality required for receipt of a transfer rather than being the core rationale for the programme, against which it is evaluated. In some cases, such as the PSNP in Ethiopia, the PK in Indonesia, and the Jefes programme in Argentina, the primary motivation for the PWP is the delivery of the wage to participants in order to alleviate poverty, and asset construction activity exists primarily to satisfy the work requirement which represents essentially a targeting mechanism, on the basis of the principle of less eligibility (as discussed above). In the Indian, Ethiopian and Argentinian programmes, when it has not been possible to provide sufficient work projects to absorb all those seeking work within an adequate timeframe, the work condition has been waived, and the cash transfer provided without any work requirement³². In these cases it is evident that the asset creation objective is wholly subsidiary to the social protection imperative, and is not a requisite component of the programme, with the result that it can be dropped if necessary in pursuit of the primary social protection objective. This situation differs significantly from that which would obtain in a type D programme, where asset creation is the primary purpose of PWP implementation.

Improve Social Infrastructure through Service Delivery

While the dominant form of employment in PWPs is the construction of physical infrastructure, historically a wide range of activities have been included under the PWP banner, including social service provision. In the New Deal programmes, PWP employment extended to teaching, adult literacy, nursery care, social care, the implementation of national statistical surveys and culture and performance art, as well as the production of consumer goods for direct distribution to recipients of public assistance. In Ireland, the Community Employment Programme (CEP) provided complementary social services, while the Jefes programme included funding for microeconomic activities in agriculture and home

³² In such instances where the programme is delinked from service delivery, the programme becomes difficult to distinguish conceptually from a cash transfer programme.

production, as well as social care for children and the elderly. The lower material input cost of social, rather than physical, service delivery has the potential to significantly reduce PWP implementation costs, and also increase the range of activities absorbing labour which enables an expansion of the scale of potential programme employment. In recent years programmes have been developed in sub-Saharan Africa which simultaneously provide employment for the poor, while also providing an expansion of social service provision, attempting to address the burden of unpaid care which falls largely on women and is increasing significantly due to the impacts of HIV/AIDS. The key challenges relating particularly to the social service delivery component of PWPs are: i) the issue of quality control, ii) the sustainability of service provision offered through non-permanent programmes, and iii) confusion regarding statutory responsibility for service delivery.

The use of PWPs to create social as well as physical assets is one of the most innovative aspects of PWP programming to have developed in recent years. This approach has developed largely in response to the needs of households affected by HIV/AIDS and has developed spontaneously in southern Africa in recognition of the need to support social infrastructure in the context of high HIV/AIDS prevalence rates and the growing pressure placed on households and existing service providers. PWP provision of social services is concentrated on Early Childhood Care and Development (ECCD) and Home Based Care (HBC) (also called Home Community Based Care (HCBC) in South Africa). Within the region, it is primarily Community Based Organisations (CBOs), Faith-Based Organisations (FBOs) and national Red Cross organisations that have developed social service-based employment programmes in response to the growth of the HIV pandemic, starting from the objective of increased service provision, rather than employment (McCord, 2005). In South Africa, this approach has been incorporated into the EPWP, with the dual objective of offering employment while also providing improved service delivery. This approach is particularly attractive as a PWP employment option, since it offers an opportunity to provide sustained part-time employment as well as meeting a recognised social need. Such programmes have the potential to absorb large numbers of workers through increased funding to the NGO or CBO sectors, and with the roll-out of VCT and ARVs throughout the region, the needs for para-medical and social support are likely to increase further.

The Zimbabwe Red Cross Home Based Care (HBC) programme (operational since 1992) illustrates the potential for the objectives of PWP employment and service provision to be addressed jointly. The HBC programme is one component of an integrated range of inputs offered by the Red Cross for those affected by HIV/AIDS, including food distribution and agricultural support, and employs over 2000 HBC facilitators, supporting an estimated 40,000 people directly and indirectly (*ibid.*). In South Africa, the need for an extension of social service provision more generally has led to the inclusion of social service provision in the national Expanded Public Works Programme (EPWP), with the objective of extending the outreach of social service provision. Social sector employment in Early Childhood Care and Development (ECCD) and Home Community Based Care (HCBC) comprises 13% of the total PWP employment. As with all government employment programmes, the programme's success and the subsequent employment of EPWP 'graduates' in HCBC and ECCD is contingent on ongoing and expanding state funding of NGO activity in the social sector.

While social service provision through PWP has focused on HBC and ECD, opportunities have been identified to expand PWP employment into a wide range of social sector interventions in sub-Saharan Africa, where currently unmet demand for services is inhibiting access to services such as support of ARV roll-out, Voluntary Counselling and Testing (VCT) service provision, tuberculosis (TB) sputum sample collection³³ and delivery, birth registration, and a range of social grant registration and application services. This shift into social rather than physical infrastructure represents a significant opportunity for the expansion of socially constructive employment in PWP programmes in countries where service provision for the poor is otherwise constrained, at a time when demand for services is increasing as a consequence of HIV/AIDS. If adequately funded, this PWP employment in this sector also has the potential to offer the extended periods of employment required in

³³ Ginsburg, adviser to the KwaZulu Natal Department of Transport and Public Works, implementing the Zibambele PWP, 2005, pers. comm.

a GEP or EGS, in direct contrast to the inherently short-term nature of employment in physical infrastructure provision.

Macroeconomic Stimulation Objective

Historically PWP have sometimes been adopted in pursuit of macroeconomic objectives, predicated on the injection of sufficient capital into the economy through the PWP wage to stimulate demand on a regional or national level, thereby stimulating secondary employment effects and facilitating economic growth. To achieve this the scale of the employment created must be large and the infrastructure created economically productive.

This objective, with its Keynesian undertones, is rarely explicit in the current PWP discourse, although it has been a major factor behind the adoption of PWP in the past, the most notable example being the New Deal programmes implemented in the USA during the depression of the 1930s, at a time when such policies entailing massive state expenditure on direct government employment were less ideologically problematic (although the decision to adopt such a massive and fiscally risky programme was contentious even at that time (Harvey, 2007a)). PWP implemented under the US New Deal programme entailed a massive expansion of state expenditure, consuming an average 4% of GDP annually, in an attempt to stimulate the economy while also providing sufficient employment to absorb a significant proportion of the unemployed and ensure that the basic needs of their families were met. Employment was provided in special programmes operated both directly by the government and also through private contractors, funded with a massive expansion in infrastructure expenditure. At their height, these programmes absorbed over 50% of the unemployed, and made a significant impact by promoting counter-cyclical expenditure and demand, and thereby stimulating economic growth, while also creating assets which themselves performed the function of stimulating growth, during a period of recession (ibid).

The New Deal programmes illustrate that attempting to achieving the objective of macroeconomic stimulation through large-scale government employment creation is contingent on massive state allocations over time, as well as on the availability of significant

human capital resources (administrative, managerial and technical) to manage effective implementation (*ibid*). It is interesting to note that the capacity to manage such a massive and complex programme effectively was in part due to the fact that the nature of the economic crisis resulted in unemployment across the skills spectrum. This rendered managerial, technical and administrative capacity readily available for deployment within the programme; a situation which is rare in contemporary settings, where a shortage of the skills required for effective programme implementation represents a major constraint to effective programme execution.

Political Stabilisation Objective

A review of the implementation timeframes of PWPs implemented in recent decades suggests that the final PWP objective may be an essentially political one; the provision of a visible government response to an unemployment or poverty crisis, with the aim of promoting political stabilisation and electoral support. Political change or instability is a common contextual feature at the initiation of many PWPs. During such periods of political instability or regime change, it is politically important for the state to be seen to be addressing unemployment in order to secure electoral support, and PWPs offer the potential for a high visibility intervention. The AGETIP, NREGP, EPWP and PK all fall into this category, being implemented directly prior to key political moments such as elections or periods of threat to the existing regime. Although PWPs may be implemented to promote political stabilisation, this objective is more frequently implicit than explicit, although somewhat unusually, this consideration was mentioned explicitly in a review of the AGETIP by its designer, who candidly stated that one of the success indicators of the programme was its high 'visibility/cost ratio' (Wade, 2004). Similarly, one particularly high-profile PWP in South Africa, which offered the best penetration into the rural poor, the largest scale of operation and the greatest impact, was implemented in one of only two provinces where the ruling party did not have a secure electoral majority³⁴. In such contexts PWP visibility may in

³⁴ The Zibambe programme, which is uniquely successful among PWPs in South Africa and is examined in detail in chapters eight to ten, was implemented by the ruling ANC (African National Congress) in

some instances be more important than the actual content or coverage of the programme. This is true at least for AGETIP, which attained only minimal coverage (less than 0.5% of the labour force), yet is widely considered to be a PWP success story and is emulated throughout the West Africa region (McCord, 2007b). This may also be true of the national EPWP in South Africa, which is presented in the popular discourse as a significant intervention to addressing the problem of the working age poor, despite its extremely limited coverage and impact (for a full discussion of international PWPs' scale of operation see chapter three). The wider political and ideological issues associated with the selection of PWPs are discussed in appendix 1.

Discussion of Objectives

As illustrated above, the PWP concept incorporates a range of potential objectives. These objectives may be implicit or explicit, and may vary in terms of their relative prioritisation. Programmes sometimes adopt a multiplicity of objectives, which may not necessarily be consistent with the type of PWP selected and may even be mutually contradictory in terms of programme design requirements. An example of this is the tension between the provision of quality assets, and the urgency of providing immediate wage transfers, as in the case of the PSNP, which can create tensions within a programme. It is suggested in the literature that the existence of multiple objectives in one programme reduces likelihood of programme success, in part due to the increased managerial, administrative and coordination burden these objectives imply, and in part due to the potentially conflicting priorities implied by diverse objectives (Curtain, 1999). A similar problem was identified in the case of the South African EPWP, where it was argued that the coexistence of multiple objectives resulted in confusion among both implementers and beneficiaries regarding the nature of the programme, with negative consequences for both performance and accountability (Karuri *et al.*, 2007).

KwaZulu-Natal province, one of only two provinces where the ANC had a real political competitor, in the form of the IFP (Inkatha Freedom Party), and where the provincial elections are highly contested.

The New Deal programmes were able to successfully accommodate a diversity of mandates due to the adoption of a flexible institutional structure, wherein the individual programmes were implemented by different agencies with clear and discrete mandates, and had the authority to elicit cooperation from a variety of other government agencies (Harvey, 2007a). Such management flexibility is rare in current PWP. Where there is an attempt to address multiple objective sets within one programme, as in the case of the South African EPWP³⁵, there is a risk that the department leading the programme may lack the authority or skills to coordinate across diverse ministries; an issue which is particularly problematic if the lead department is one primarily charged with physical infrastructure provision, or is an external body, such as a Project Management Unit (PMU), with limited linkages with local or national government departments.

2.7 Conclusion

A critical weakness in the current social protection discourse is the failure to recognise explicitly that PWPs are a highly heterogeneous form of intervention. In the absence of an analytical framework providing a PWP typology or schema of programme objectives, which explicitly recognises their heterogeneity, PWPs are poorly conceptualised, and the idea that a single type of PWP (the PWP ‘archetype’ offering short term PWP employment) can be implemented effectively in a variety of settings, without cognition of the fact that a particular type of PWP can only achieve a limited set of objectives and can only function effectively in a particular labour market context, is pervasive in both the literature and programme design. This problem is in part a consequence of the conceptualisation of a PWP as a monolithic, rather than a highly differentiated, set of linked but functionally discrete interventions. The consequence is the tendency to adopt the generic term PWP without further definition or discussion, and to assume that whatever form of PWP is selected, a range of policy problems can be addressed, irrespective of the type of programme selected, or the nature of the

³⁵ With reference to the objectives of the South African CBPWP, the predecessor of the EPWP, it was stated that ‘Relief and development, income generation and empowerment, jobs today and training for future jobs ... is... without a precedent elsewhere in the world.’ (Adato et al. et al., 1999: xiii).

underlying labour market problem i.e. the relationship between PWP form and function remains fuzzy in both the academic and political discourse.

This conceptual weakness also has programme design and analytical consequences. Failure to set programme objectives with adequate rigour can lead to tensions and contradictions between objectives and negatively affect programme outcome (Curtain, 1999), while any assessment of programme performance is fundamentally influenced by the objectives against which a programme is evaluated. Neither the lack of analytical rigour in relation to PWP form and objectives, nor the programme design or analytical consequences are recognised in the existing literature.

This chapter has attempted to address this critical weakness by providing both a PWP typology, and a schema of objective sets, in order to present a framework for a more rigorous and analytical use of the term PWP, and more explicit statements on PWP objectives, with the aim of stimulating more critical thinking on the concept of PWPs *per se*, and also the relationship between form and function that this implies. The typology and schema of objectives will be adopted in the following chapters.

3 THE SOCIAL PROTECTION FUNCTION OF PWPs

In the previous chapter a PWP typology was proposed and a schema of PWP objectives put forward, to promote a more rigorous and less generic approach to PWP analysis. In order to explore the social protection function of the various PWP types this chapter links the PWP typology into the current social protection discourse.

3.1 Definition of Social Protection

For clarity from the outset, it is necessary to review and agree on a definition of social protection. While there are various definitions of social protection currently in usage (see Barrientos and Hulme (2008:3-4)) the broad framework developed by Devereux and Sabates-Wheeler (2004) offers a conceptually clear and intuitively comprehensible definition, based on rights, needs and empowerment. This can be set alongside the World Bank's Social Risk Management (SRM) framework, which focuses more exclusively on risk (Holzmann and Jorgensen, 1999). Such an approach allows both frameworks to illuminate the various functions of different types of PWP interventions.

Devereux and Sabates-Wheeler (2004) describe social protection as the attempt to promote the protection and accumulation of assets in order to reduce vulnerability. Their definition of social protection includes all initiatives that: provide income (cash) or consumption (food) transfers to the poor, protect the vulnerable against livelihood risks, and enhance the social status and rights of the excluded and marginalised. They define the vulnerability social protection is attempting to address as a function of exposure to shocks or negative processes, mediated by a household's resilience to those shocks. Devereux and Sabates-Wheeler go on to describe a hierarchy of social protection interventions consisting of three categories to which they apply the terminology *protective*, *preventive*, and *promotive* or *transformative* social protection, with the latter being the form of social protection which has the most significant and enduring impact. These components conform broadly with the tiers of social protection terminology developed by the World Bank in its SRM framework: risk

coping, risk management and risk reduction (Holzmann and Jorgensen, 1999)³⁶. It is useful to consider the social protection function of PWPs in relation to these two coexisting sets of definitions which are currently in common usage within the social protection discourse. In this way it is possible to initiate a critical analysis of the social protection function of public works, in relation to the broader social protection debate within which such programmes are located. Such an analysis has not been carried out elsewhere in the social protection literature, with PWPs escaping the critical scrutiny applied by economists and social development theorists to other such forms of social protection intervention. Currently, PWPs tend to be positioned generically within the social protection instrument armoury, but their function and anticipated impact is not clearly analysed in terms of the social protection concept in terms of its objectives, or with reference to the different levels of social protection interventions.

Integrating PWP interventions into the three levels of the SRM or social protection discourse provides a useful framework for examining the social protection function of public works, and assists in the development of a theoretical framework for the analysis of likely PWP impacts. In order to achieve this, it is necessary to attempt to identify the vectors through which social protection benefits may be conferred through PWP interventions.

There is frequently an *a priori* assumption that PWPs have a positive impact on poverty alleviation/reduction, either directly or indirectly, and in some instances even livelihoods promotion, through an accumulation of the human, material or financial assets required to move out of chronic poverty, on the basis of one or more of the PWP objective sets outlined in the previous chapter. When the concept of the PWP is interrogated to ascertain how these outcomes might be achieved, it can be argued that there are three primary vectors through which these impacts may potentially be achieved: i) the wage transfer, ii) benefits accruing from the assets created, and iii) improved labour market performance as a result of

³⁶ It is important to note that notwithstanding the broad hierarchical conformity of the two models, there remain significant differences in terms of the conceptualisation of social protection underlying each model. However, for the purpose of creating a framework for the location of differing PWP types in terms of their social protection function, highlighting this conformity is of value.

workplace experience and/or training. These three vectors are proposed as the means through which PWP participation might confer social protection benefits, in terms of the set of explicit and implicit expectations of how PWPs function in the social protection discourse, at political and populist level (and theoretical, inasmuch as this exists).

A dual typology has been adopted in some sections of the literature, although it has not been formalised as such (see, for example Subbarao (2001)), which focus on the function of the wage transfer, while also recognising the importance of considering indirect effects accruing from the assets created. In line with this, Ravallion posits the need to include ‘spillover or indirect effects from assets’ (2003:1), identifying two vectors contributing to the social protection outcome of PWP participation: wage and indirect effects from the assets created (*ibid*). However, a review of PWPs internationally suggests that a third vector – training or work experience benefits – also exists in the current PWP discourse. The inclusion of training/work benefits reflects the prominence that skills development and work experience have acquired in the ALMP debate in recent decades (Martin and Grubb, 2001), and the influence of this debate, and of the US ‘workfare’ ideology in particular, on the design of PWPs in developing countries (McCord, 2007b). The perceived importance of skills development as a potential vector of social protection benefit transfer is illustrated in the EPWP (McCord, 2007a)³⁷, and is critically explored in chapter seven.

If skills development is added to Ravallion’s analysis, the mechanisms to transmit potential social protection benefits through PWPs may be grouped into three main vectors:

- Wage transfer (cash, food or inputs)
- Asset benefits
- Training or work experience benefits

³⁷ Institutional capacity building has been mooted as an additional vector of PWP impact. Devereux and Solomon argue, ‘In addition to the immediate wage income that labour-based programmes transfer to participants, these programmes also aim to generate long-term benefits through the assets created, training and skills received, and institutional capacity building. Clearly, a programme’s overall success must assess the extent to which it is able to transfer all these benefits.’ (Devereux and Solomon, 2006:24) There is little evidence to support the explicit inclusion of this fourth vector, and so capacity building has not been included in the typology of vectors.

The social protection impact of a PWP will vary depending on what combination of these vectors is effective in any given programme, the quality and relevance of each, and the duration and timing of their provision, which in turn will be influenced by the type of PWP adopted, and the range and relative prioritisation of objectives ascribed to the programme. These three vectors will not be critically discussed in this chapter (they will be examined in detail in the following chapters), but will be used as a form of shorthand to help locate PWPs within the broader social protection discourse.

In Figure 3.1, a social protection framework is constructed which adopts the Devereux and Sabates-Wheeler conceptual framework and integrates it with the SRM social protection terminology. PWPs are located within this framework in an attempt to illustrate the diverse social protection outcomes likely to accrue from PWPs depending on the type of programme adopted and the vectors through which social protection benefits are conferred.

In this figure, the World Bank concepts of coping, mitigation and reduction are equated with the concepts of protective, preventive and promotive/transformational social protection respectively. Safety nets comprise interventions which promote coping/protective and/or mitigation/preventive outcomes, while the term 'springboards' may be used to describe interventions which promote mitigation/preventive and/or reduction/promotive/transformational outcomes.

Figure 3.1: A Conceptual Framework for the Social Protection Function of Public Works

IDS Terminology		World Bank SRM	Public Works Intervention	Vector of Impact
	Promotive/transformative (Social transformation)	Risk Reduction	Programme resulting in accumulation of productive financial physical and/or human capital (Type B plus complementary interventions & type D in contexts of frictional unemployment)	Wage Assets Skills
Springboards				
	Preventive (Insurance mechanism)	Risk Mitigation	Sustained employment/employment guarantee at times of need (Type B)	Wage Assets
Safety nets				
	Protective (Social assistance)	Risk Coping	Short-term employment (Types A & C)	Wage

Source: Derived from McCord (2005a) incorporating Devereux and Sabates-Wheeler (2004).

These categories are useful in terms of identifying likely PWP outcomes, with different programme types corresponding to different social protection outcomes. For example, a PWP offering only a single short-term episode of employment with no sustained benefits accruing from the assets created (type A), would confer only protective social protection (social assistance), limited to promoting a household's capacity to cope with risk in the short term. The vector through which this would be achieved would be the wage transfer (food or cash), and the impact would be contingent on the value of the transfer in relation to household subsistence shortfalls. Here the function would be to enable consumption smoothing during a period of temporary labour market disruption. This conforms to the World Bank perception of the social protection function of PWPs (Vodopivec, 2004), which characterises PWP as functioning solely in relation to the provision of risk coping as part of

an active labour market programme, in line with the type A PWP archetype identified above. However, PWPs function outside this limited sphere of social protection if other types of PWP are considered. If employment were offered on a sustained basis or guaranteed in times of need, without sustained benefits accruing to participants from the assets created, a programme would confer preventive social protection, or risk mitigation, representing a form of risk insurance, as in the NREGP or MEGS in India. Here again, the wage transfer would be the vector of social protection, offering either a basic income floor, or enabling repeated periods of consumption smoothing during periods of under- or unemployment, and again the impact would be contingent on the level of the wage.

In the context of chronic poverty and unemployment, the potential of PWPs to provide sustained social protection benefits and poverty reduction (promotive or transformative social protection) is contingent on programme participation resulting in the accumulation of productive financial, physical or human capital as intended, although not necessarily achieved, in the Ethiopian PSNP or the Argentinian Jefes programmes. This could be achieved by the provision of a wage which is sufficient to permit capital accumulation, the creation of productive assets which directly contribute to improved livelihoods, or effective skills development which results in improved income-earning performance, as discussed above. This illustrates the critical importance of the relationship between the labour market context, and the type of PWP adopted in response, in determining the social protection impact of the intervention. This insight is at the heart of the critique of many PWPs implemented in sub-Saharan Africa and presented in this thesis. The match between the type of PWP selected and the economic and labour market context is a critical determinant of social protection outcome. Other issues affecting the social protection outcome relate to the universality or targeting of the programme, coverage (the scale of the intervention in relation to need), the quality of employment provided, and programme implementation modalities. These issues are examined below in order to ascertain their implications for the social protection impact of PWPs.

3.2 Labour Market Analysis

PWPs may be implemented in a range of contexts which may, for the purpose of the ensuing analysis, although somewhat reductively, be grouped into two broad labour market and development situations: i) acute periods of labour market or livelihoods disruption (e.g. drought or flood), and ii) chronic high levels of under- or unemployment and poverty, or repeated seasonal vulnerability in the form of regular food security crises. The two scenarios in the second grouping are frequently not mutually exclusive.

In each scenario, the effectiveness of a PWP intervention, in terms of its contribution to social protection, is contingent on the appropriate duration of PWP employment in relation to the labour market disruption which forms the context and origin of the need for a social protection intervention, and the extent to which it protects livelihoods and enables consumption smoothing to take place. Hence, the nature of the labour market crisis should be a key determinant of programme design, particularly in terms of programme duration if the programme is to have a significant social protection impact, as the form of PWP selected needs to be appropriate to the particular labour market context. In the case of an acute period of labour market disruption, the immediate PWP social protection objective would be asset protection and temporary consumption smoothing, with the assets produced through the PWP potentially also serving to mitigate future risk, promote the livelihoods of workers and/or other community members, and/or enhance development objectives of the broader society (with the service delivery objective set subordinate to the social protection objective set). By contrast, in situations of chronic or repeated labour market disruption, PWP effectiveness is contingent on the extent to which it contributes to adequate consumption on a sustained basis, which could either be achieved through the implementation of a programme offering ongoing or repeated transfers as required. This accumulation of financial, human and physical assets could then provide sustained social protection benefits into the future, even after the period of PWP employment and direct wage transfer is completed. In both cases the effectiveness of the PWP is contingent on the extent to which it enables asset protection and consumption smoothing throughout the period of labour market crisis, be it acute or chronic.

It is therefore critical to match both the duration of PWP employment and the degree of accumulation anticipated, to the labour market context, taking into account the nature of the labour market disruption in each instance. Employment in short-term PWPs based on the labour intensive creation of physical infrastructure typically lasts for only two to four months (McCord, 2007a). It is likely that the social protection benefits arising from short-term PWP employment would be limited to the period in which the wage transfer is taking place (this assumption is discussed in detail below). As a result, for most PWP participants it is likely that the period of benefit will be limited to the period of wage resource flows and hence be experienced for a limited duration only. While this is not likely to be problematic in the context of an acute period of unemployment, if the period of PWP employment matches the period of unemployment, a single short-term episode of employment in a PWP is unlikely to have significant sustained social protection outcomes in the context of chronic poverty and unemployment, or cyclical unemployment. If a sustained social protection outcome is desired in this context, a medium to long term intervention would be required, which would enable sustained consumption smoothing and possibly also accumulation in the form of human or financial capital or assets. In this context, the level of wages would also be a critical determinant of potential accumulation. Given the limitations of the short-term PWP as an instrument of social protection in the context of chronic unemployment and poverty, set out above, it would be expected that long-term PWP employment provision would be the most appropriate type of PWP response in this context; however, this is not always the case, and PWPs offering short-term employment (types A, C and D) are frequently implemented in contexts of chronic poverty (see, for example, MASAF PWPs in Malawi, EPWP projects in South Africa, and ILO EIIP in Ethiopia (Chirwa *et al.* (2004a); McCord (2004a); Mengesha and Osei-Bonsu (2007) respectively). The identification of this design ‘mismatch’ between the needs indicated by the labour market context, programme objectives, and the design of the PWP response represents a critical insight into the poor performance of many current PWPs, which has not been explicitly recognised in the literature to date, and which will be explored in more detail below.

3.3 Design Features Affecting Social Protection Impact

A review of the international experience indicates that there are a set of common design features which directly impact on the likely social protection outcome of PWPs. Of central importance is programme duration in relation to the labour market crisis; an issue alluded to above. This consideration has direct consequences in terms of the consumption smoothing and accumulation outcomes of the programme, and is explored below in relation to the dominant conception of the term PWP, and the PWP archetype discussed above. Other critical design features affecting social protection outcomes are identified as targeting and coverage, scale, the quality of employment offered, and programme implementation modalities. Each is discussed in turn below.

Duration

There is a tension in the discourse relating to the need for the type of PWP selected to reflect the specificities of a particular context, as discussed above, and the simultaneous identification of the PWP concept with the archetypal short-term (type A) PWP which constitutes the dominant World Bank definition of the term. The implications of this and the resulting contradictions in the current debate are discussed below, with particular reference to PWP duration. Drawing on cross country experience, Subbarao *et al.* reiterate the linkage of PWP to transient rather than chronic poverty, arguing that:

‘... public works are essentially a temporary safety net and should never be used as a permanent escape route from poverty.’ (1997:168)

The implication of this statement is that PWPs are appropriate only where poverty is transient and a temporary safety net is required, with the underlying assumption that the benefit period is limited to the period of the wage transfer, and that the generic term PWP is synonymous with the type A archetype in World Bank parlance. However, somewhat inconsistently, it is also argued in the mainstream literature that when unemployment is cyclical, the PWP intervention should be repeated accordingly, and when poverty is chronic, there is a need to guarantee employment on an ongoing basis, as required, implying some form of EGS, rather than offering only temporary employment, if PWPs are to perform a social protection function. For example, Datt and Ravallion argue that:

‘... failure to obtain this work [PWP employment] whenever needed will tend to undermine the social insurance function of public works schemes.’ (1994a:1358)

Subbarao *et al.* concur, suggesting that:

‘... in countries where poverty-gap ratios are high, the need to run the programme [PWP] year-round (and thus raise transfer benefits to the poor) assumes greater importance.’ (1997:84)

This indicates a recognition that sustained, rather than short-term, employment is required if PWPs are to address chronic poverty; a statement which is in tension with the statement made by Subbarao *et al.* above, which argues that PWP should be considered as an inherently ‘temporary safety net’. This apparent lack of internal consistency in the literature is problematic, and is worsened by the prevailing use of the generic term ‘public works’ without adequate reflection of the diverse range of PWP instruments, as discussed in chapter two. The use of the term PWP in the statement above is at odds with the dominant World Bank definition of PWPs, which presents them as short-term type A, C or D interventions, (see for example Subbarao (2001:2) and Vodopivec (2004), *op cit*), again illustrating the inconsistency and confusion which permeate the current literature.

An important implication underlying these statements is, however, a reference to the fact that sustained benefits, subsequent to the period of programme implementation, should not be anticipated, and for this reason PWPs do not offer a ‘permanent route out of poverty’. Subbarao *et al.* reiterate this argument, stating that the consumption smoothing impact of PWPs in the context of crises is inherently limited, and linked temporally to the period of implementation and wage receipt, and that for this reason PWPs are not, as is frequently conceptualised, instruments to deliver sustained poverty reduction:

‘... public works programs provide mainly current benefits. They are not meant to function as a permanent escape route from poverty. In fact, most countries offer only temporary employment during off-seasons, when agricultural work is limited, thus programs are expected to offer only stabilization benefits (consumption smoothing in poor households), not transfer long-run benefits.’ (1997:70)

It is debatable to what extent ‘most countries’ offer repeated, rather than once-off access to PWP employment, as Subbarao *et al.* imply, but this should not obscure the key argument

they are making that the primary benefit accruing from PWP participation is the wage benefit which is limited to the period of employment, and hence that long-term social protection benefits should not be anticipated from PWP employment, since the wage is typically not sufficient to allow significant accumulation. However, the subtlety of this message is frequently lost in operational contexts, with short-run single episodic programmes (type A) implemented in all three contexts, without reference to these nuances.

PWPs offering single short-term episodes of employment are repeatedly developed, funded and implemented in situations of chronic unemployment with the objective of providing social protection to populations experiencing chronic, rather than transitory, poverty. This is done with support from donors, who anticipate sustained improvements in livelihoods and poverty reduction as the outcome of their interventions,³⁸ despite the fact that the literature argues that the effective sphere of such short-term PWPs is temporary crises, functioning to enable consumption smoothing.

Some PWPs have been designed in recognition of the need to deviate from the type A PWP archetype in differing contexts, offering year-round or repeated PWP employment, where the labour market crisis is cyclical or chronic, particularly in Middle Income Countries (MICS). One example is the type B Zimbabwe road maintenance programme in KwaZulu-Natal, South Africa, offering ongoing part time employment. This programme is described in detail in chapter nine. It is notable that this programme was designed and funded without inputs from international donors such as DFID, the ILO and the World Bank who, particularly in sub-Saharan Africa, tend to dominate PWP design, resulting in a set of programmes which replicate donor PWP design preferences, primarily offering type A or C (labour intensification) programmes, providing a single episode of employment, irrespective of the labour market context, with the term PWP in the region becoming almost synonymous with type A and C PWPs, irrespective of their particular objective sets. For these reasons the Zimbabwe programme is the exception rather than the rule in sub-Saharan

³⁸ An example is one short-term DFID-supported PWP in Malawi which has as its goal 'enhanced livelihoods for poor people in Malawi' (DFID, 2004a).

Africa, where a common assumption remains among policy makers that the implementation of a generic PWP offering short-term employment is likely to have a meaningful social assistance impact, through a set of direct and indirect effects, and moreover that it will impact significantly on poverty, despite the empirical and theoretical evidence in the literature to the contrary.

Programme duration has significant implications for the stabilisation (consumption smoothing) impacts of a PWP. Given the critical importance of the stabilisation benefits of PWPs, the conceptual tension between PWP type and intended outcome when short-term type A, C or D PWPs are implemented in contexts of chronic unemployment is evident, particularly if the intention is to provide social protection benefits directly, rather than indirectly. Evidence from the type B Zibambele programme in South Africa suggests significant benefits in terms of material and financial asset ownership, and human and social capital improvements resulting from a type B programme (see discussion in chapter eleven). These benefits resulted from a programme with relatively low remuneration but greater employment security and, most importantly, a sustained period of employment. These findings are consistent with the international literature on PWPs which highlights the importance of sustained employment for addressing the challenge of chronic poverty (see for example Dev (1995)).

It is the risk insurance function of sustained employment which can offer preventive or risk mitigation benefits, and potentially also enable the accumulation of assets. If the social protection impact is to be sustained after programme termination in contexts of chronic unemployment, it is critical for PWP employees to have acquired the 'minimum or threshold asset bundle that enables future accumulation' during the period of programme participation (Carter, 2004)³⁹. Unless the poor can accumulate sufficient resources to pass a critical asset threshold, they are very likely to fall back into poverty (Carter and May, 1997; Carter, 2004). Hence, the social protection challenge is to 'create enabling conditions such that people can use time and markets to improve their well-being (and/or that of their children)' and in this

³⁹ This text was contained in a 2004 presentation; page numbers not included.

way ‘crowd-in’ private accumulation (*ibid*). This is unlikely to happen if accumulation can only occur over a short period of time, as is typical in the short-term employment periods of employment offered by conventional labour-based infrastructure creation PWP (types A and C). Programmes focusing on the maintenance, rather than construction, of physical infrastructure or the provision of social services offer a greater opportunity for an extended period of wage transfer, and in this way increase the potential for accumulation to cross the critical asset threshold. Where there is a desire to create medium to long term PWP employment opportunities, the development of social sector employment may be of particular value, for example, in the areas of Early Childhood Development (ECD) and Home Based Care (HBC).

Targeting and Coverage

A third key PWP design option in terms of a programme’s social protection outcome is whether a PWP is targeted or universal (available to all those eligible to participate). To some extent this choice may be informed by issues of need, in terms of the identification of vulnerable groups, but it is also often contingent on the amount of funding available, as this dictates the scale of the programme in relation to the number of potential participants in search of employment. Universality is only an option if a PWP is implemented on a sufficiently large scale, either nationally or within a programme catchment area, such that all those seeking work can attain it (or some alternative form of PWP transfer if work is not available) and to some extent this is contingent on the institutional structures through which PWPs are operationalised, as well as budget constraints. In many cases coverage is an artefact of history, particularly where PWPs are project-based rather than part of a national social protection or labour market programme implemented directly by the state (typically type A, C or D, rather than type B programmes). In the case of project-based PWPs, or national programmes contingent on NGO implementation, as in the case of much of the MASAF PWP in Malawi, implementation tends to be concentrated in areas where NGOs have their programming base, rather than providing equitable coverage or promoting implementation in areas of particular need, potentially compromising the equitable distribution of a PWP’s benefits.

In many programmes the wage is deliberately low in order to limit demand for employment, in effect making ‘universal’ provision more feasible by virtue of the ‘less eligibility’ condition, while at the same time attempting to ensure that the poor are the primary beneficiaries (Vaidya and Ahmed, 2007). This form of targeting is administratively cheap, however, the efficacy of this approach is open to question in terms of reaching the poorest (Barrett and Clay, 2003; Lembani and Madala, 2006). In countries with high levels of poverty, low prevailing wages and high rates of unemployment, the use of low wages to promote the self-selection of the poorest into PWPs may entail setting the wage so low that it fails to meet the basic subsistence needs of participants, thereby undermining the social protection rationale of programme implementation. Finding the balance between setting a wage low enough to limit leakage to the non-poor, while also having a significant impact on the livelihoods of participants, remains a key challenge in many PWP contexts.

Reliance on a capped wage level to promote targeting may represent a rather blunt approach, resulting in somewhat approximate targeting outcomes. A capped wage will also reduce the reduction in the poverty gap resulting from programme implementation, with direct negative social protection consequences, and will reduce the likelihood of capital accumulation in the medium term, with negative implications for medium-term transformative outcomes. In order to reduce inclusion and exclusion errors, and approach the targeting nuance and subtlety often implied in the PWP rhetoric (for example, the targeting of certain demographic subgroups such as women or youth), explicit targeting criteria are required which reflect the objectives of the programme and recognise the heterogeneous nature of the unemployed and their differing needs and potential.⁴⁰ For example, if household poverty reduction is the primary goal, then PWP employment might be targeted at female household heads, since research has indicated that this group tends to be more vulnerable, and that transfers to female household heads have a greater impact on household welfare than transfers to males (Appleton and Collier, 1995). If, however, promoting skills development and future employment prospects is the priority, then youths with the ability to travel in

⁴⁰ It should be noted however, that such criteria are only of value inasmuch as there are means to ensure compliance during programme implementation.

search of employment, and many years of potential labour market participation ahead of them, would be a more appropriate target. Many programmes, however, do not monitor the outcome of their targeting strategy, and actual, rather than intended incidence is frequently unknown (see discussion in chapter four).

Scale

The other key issue determining PWPs' actual or potential social protection impact is the question of scale. PWP scale of operation is rarely mentioned in the discourse, and where it is mentioned, it tends to be divorced from reference to programme objectives, the extent of need, eligibility, the scale of unemployment, or the size of the labour force (a more neutral and readily comparable denominator than unemployment, which tends to be variously defined). An example of this is given in Subbarao (2003:2), in which a table listing the scale of operation of PWPs in selected countries are provided, but without any means to contextualise the amount of employment created. Discussion of the scale of a programme without reference to the scale of the problem is problematic in terms of assessing the adequacy of social protection coverage offered by a programme, and the potential for that programme to contribute to national social protection objectives.

In Table 3.1 the scale and coverage of eight PWPs from different countries are compared to illustrate the diversity of performance. It is interesting to note the low levels of coverage achieved in many celebrated programmes, such as AGETIP in Senegal or the South African EPWP. Comparisons are problematic given the limited and poor quality data available on PWP performance, and crude indicators adopted in many programmes such as 'jobs created' without reference to the duration, or full or part time nature of the 'job'. In order to promote comparability, two coverage indicators have been constructed and included in the table: jobs created per annum as a percentage of the labour force, and annual person-years of employment created as percentage of the labour force. Size of labour force was chosen in preference to unemployment rate for these comparisons, given international inconsistencies in definitions and measurement of unemployment and underemployment. Comparison of PWP scale in relation to labour force gives a more readily comparable indicator of the labour market significance of a programme, although it does not relate programme size to scale of

unemployment. In order to offer a fiscal comparator across the programmes, programme cost as a percentage of GDP has also been calculated⁴¹. For each programme, the most credible data available have been selected and the data represent the scale of performance at peak levels of programme operation – note for India the second figure is an estimate, based on programme projections and budgets for 2008/9.

⁴¹ Note, this measure is used for indicative purposes only and does not imply that programmes are necessarily government funded.

Table 3.1: A Comparative Assessment of PWP Scale

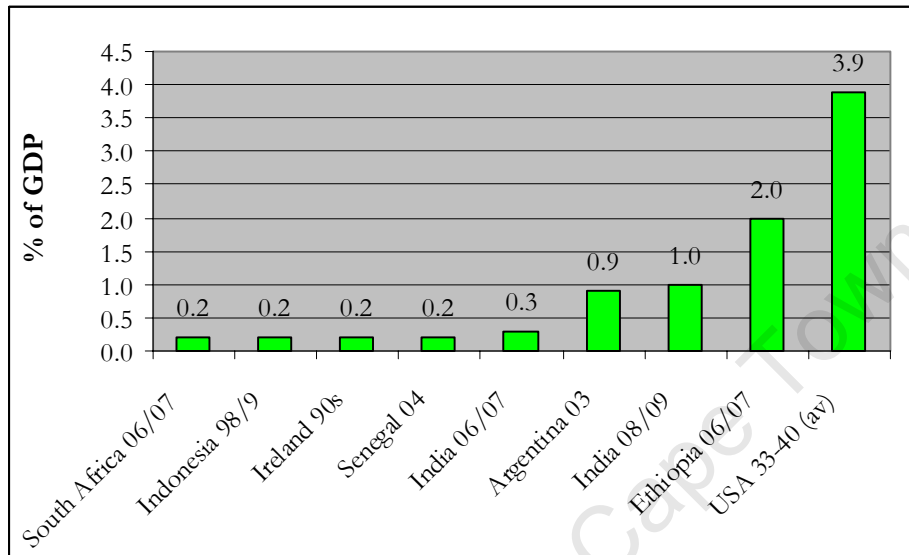
	Total number of PWP jobs/annum	Total number of person years/annum	Total Labour Force (million)	Jobs as % labour force	Person years as % labour force	Programme cost as % GDP
Argentina: JEFES (2003)*	2,210,000	n/a	17.0	13.0	n/a	0.90
India: NREGP (2006/7)**	21,200,000	4,109,091	427.0	5.0	0.96	0.30
India: NREGP (2008/9 est)***	n/a	n/a		15	3.00	1.0
Indonesia: PK (1998/99)	1,481,481	181,818	92.0	1.6	0.20	0.20
Ireland: CEP (90s)	41,000	n/a	1.4	2.9	n/a	0.18
Ethiopia: PSNP (2006/7)	1,500,000	n/a	31.0	4.8	n/a	2.00
Senegal: AGETIP (2004)	21,000	n/a	4.5	0.5	n/a	0.80
South Africa: EPWP (2006/7)	200,000	70,000	16.0	1.3	0.44	0.20****
USA: New Deal Programmes (1933-1940)	n/a	n/a	53.0	3.4-8.9	n/a	3.9

Source: McCord (2007b)

- Notes: *
- The Jefes programme has a small companion programme, the Programa de Emergencia Laboral (PEL), which is similar in terms of benefits but has slightly differing eligibility criteria (Harvey, 2007b), and so the data here are not representative of total PWP expenditure or performance in Argentina.
- **
- NREGP 2006/7 was only operational in 200 out of 600 districts.
- ***
- Indicative figures only based on assumption that programme is taken to scale as anticipated, i.e. programme is extended to all 600 districts by 2009, total cost anticipated to be approx 1% GDP, and approx 15% of the total labour force is likely to be employed.
- ****
- This figure rises to 0.47% if the funding allocation to infrastructure is included, however, since this is not additional funding, but existing funds which are to be used in a more labour intensive way, this figure has not been used in the table, and the 0.20% represents only social and environmental allocations for direct government employment activity.

In Figure 3.2 the budgetary allocations to the various programmes are compared as a percentage of GDP to illustrate the diversity of scale from a fiscal perspective.

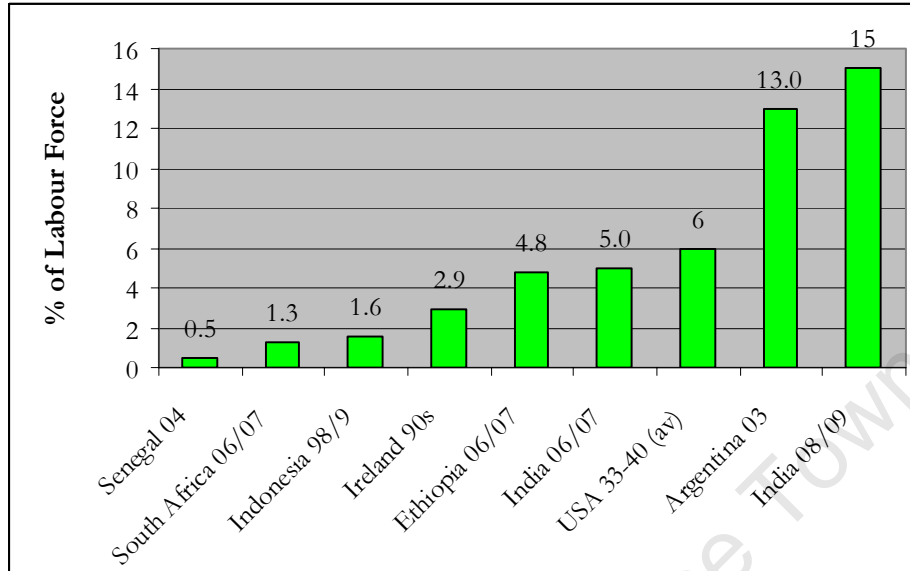
Figure 3.2: PWP Costs as Percentage of GDP by Country



Source: Derived from McCord (2007b).

In Figure 3.3 the number of jobs created within the PWP is presented as a percentage of the total labour force. This also indicates the significant range in operational scales of the illustrative programmes, despite the programmes sharing similar objectives in terms of addressing unemployment and poverty. Senegal's AGETIP, based on labour intensification of infrastructure expenditure, in line with the ILO's EIIP, has the lowest share of workers as a percentage of the labour force, at 0.5%, while Ethiopia's Employment Guarantee Programme, the NREGP as currently implemented, and the USA's New Deal Programmes of the 1930s provided similar levels of employment – 5 to 6% of the labour force – while Argentina's Jefes programme at its height, and the anticipated full operational scale of the NREGP are significantly higher, at 13 and 15% respectively.⁴²

⁴² Actual Jefes performance was higher than the data suggest, as programme implementation stimulated a significant increase in labour market participation by women, and hence increased the size of the labour force.

Figure 3.3: PWP Jobs as a Percentage of the Labour Force

Source: Derived from McCord (2007b).

Such a comparison by scale is rarely conducted in the literature, and is extremely instructive in illustrating the problem of considering PWPs as a generic intervention, in terms of illustrating the diversity of scale of operation, even in programmes with national coverage aspirations. While each of these PWPs enjoys a profile in the international literature as a significant national policy response to social protection needs, the scale disparities illustrated above when the programmes are contextualised, imply significantly differing social protection outcomes, with the South African and Senegalese programmes being unlikely to have a similar impact to the far larger Argentinian or Indian programmes, due to their more limited coverage and cost, although in the domestic policy discourse all are presented as similar social protection interventions.⁴³

⁴³ These findings are interesting given that the levels of unemployment in South Africa are higher than those experienced at the time of implementation of all the other programmes, with the possible exception of the USA during the 1930s, and so a larger scale South African PWP response might have been anticipated. The comparative scale and limited fiscal allocation to the programme is also noteworthy, given that it is intended to provide a significant social protection impact as part of the government's social security framework, and to functionally replace a social grant for the working age poor unemployed. Social Transformation 2007, the ANC Policy Discussion Document, states that 'to respond to the plight of the poor who do not qualify for social assistance, government has set up public works programmes to draft the

Many PWPs which do not attempt to offer ‘universal’ access to employment are geographically limited, and even within their geographical operational areas, coverage is often limited to a small percentage of those eligible. Even in ‘national’ PWPs such as the EPWP in South Africa, or the MASAF PWP in Malawi, coverage is limited to a small proportion of those eligible, and only in a limited number of locations (Chirwa, 2007), resulting in a patchy and inequitable distribution of social protection provision, even without taking into account the variable quality of the provision, in terms of wages, working conditions, etc.

Similarly, ILO supported EIIPs tend to offer small-scale localised employment opportunities, which as a result are highly rationed, rather than providing comprehensive social protection provision at a national, regional or even local level. In cases where such a PWP represents the national response to the problem of the working age poor, and is the sole programme to target this group, or when it is the only social protection intervention available in a particular location, these coverage limitations may represent serious deficiencies and inequities in social protection provision.

The Quality of Employment

Coverage limitations represent a ceiling dictating the maximum proportion of eligible beneficiaries who may be included within a given programme (assuming it is perfectly targeted to this group without significant inclusion or exclusion errors), and therefore determine the extent to which members of this group will or will not receive social protection benefits *per se*. However, it is the quality of the employment offered which affects the degree of social protection benefit experienced by participants. This issue of employment quality has not been explored explicitly in the literature, but has been suggested by the work of Dev (1995), who argued that the availability and predictability of wage flows over time was more important than the net value of the transfer, in terms of its consumption smoothing benefits. Other key factors influencing the quality of employment, and the social

unemployed into productive and gainful employment, while also delivering training to increase the capacity of participants to earn an income once they leave the programme.’ (ANC, 20072b)

protection consequences of PWP employment are the predictability of the wage and the flexibility of employment⁴⁴. Wage predictability takes the form of participant certainty that wages will be paid, and regularity of wage payment and stability of the wage level. Delays in payment and uncertainty over payment levels (sometimes resulting from fees or deductions extracted illegally by programme implementers) can undermine potential social protection benefits which would otherwise accrue to workers from a given wage. Payment delays, often resulting from administrative difficulties or delays in donor funding, can result in significant difficulties for households who have given up alternative survival strategies to participate in PWPs, in the hope of timely cash remuneration. However, the lack of voice and feedback opportunities in PWPs means that although the quality of the wage is challenged in many programmes by such implementation problems, the issue fails to enter into the mainstream PWP discourse as a factor influencing the social protection outcome of the programme⁴⁵. Providing such wage predictability reduces the information asymmetries often experienced within PWPs when workers are not sure how much, or when they will be paid, or, in some scenarios where scepticism exists about government capacity and corruption, whether they will be paid at all for their labour.

Employment flexibility has a range of characteristics, including the provision of part-time employment opportunities, flexible working hours, provision for the acceptance of substitute labour if a PWP worker is sick or has the opportunity to participate in alternative, temporary income-generating activities, and a mechanism for the permanent replacement of one worker with another household member in the case of death. The consequence of such employment flexibility is that it increases the likelihood of participation by members of labour-constrained households, who might otherwise find it impossible to reconcile PWP employment with their own ongoing domestic responsibilities, and hence not be able to

⁴⁴ These employment flexibility innovations were included in the Zibambele programme in KwaZulu-Natal, see chapter nine, and were felt by participants to be a major factor in the success of the programme.

⁴⁵ This issue mirrors the current debate about donor relations with recipient governments, which asserts that aid must be regular and predictable and allocated for a sustained period (see for example the report of the Commission for Africa (2005)). While this argument has been largely accepted by donors in terms of bilateral aid flows, it has not translated into programmes which respect similar principles in relation to the poor, reflecting the concern for regularity and predictability at a microeconomic level.

benefit from participation. It also enables workers to optimise their livelihoods opportunities, by reducing the need to forgo additional *ad hoc* employment opportunities, while employed in the PWP. Finally, and critically, it recognises that morbidity and mortality are key drivers of vulnerability among the poor, and allows households to protect household PWP income, even in times of sickness and death. These employment quality factors not only increase access to PWPs by the poor, but also help to empower participants, enabling them to maintain autonomy over livelihoods decisions, and to optimise their income from a variety of sources while participating in the programme. In these ways, the social protection benefits accruing are positively affected by the provision of ‘good quality’ employment, which is sensitive to the needs and opportunities of the workers.

Implementation Modalities

PWP performance also varies considerably as a consequence of choices relating to implementation modalities, which are determined by a range of budgetary, administrative and political considerations. While some programmes are implemented directly by the state, others are implemented by NGOs, directly by multilateral donors such as the World Food Programme or the European Union, through autonomous non-governmental Programme Management Units (PMU), as, for example, the European Union PWP in Malawi, or by private engineering and construction contractors⁴⁶. These different implementation modalities can have a significant impact on PWP outcomes, affecting the relative prioritisation given to different PWP objectives. Private sector-implemented PWPs, for example, tend to place lower priority on poverty targeting or social protection considerations than on attaining the contractually specified technical outcomes relating to the assets created (service provision objective sets). This is in large measure due to the limited contractual incentives for private sector implementers to ensure that social protection components of the programme, such as targeting the poorest, or ensuring timely wage payment, are satisfied (McCord, 2006a). This situation may be compared to implementation by other agencies for whom social protection objectives may dominate, for example, the Ethiopian PSNP is

⁴⁶ The range of PWP implementation modalities is illustrated in Appendix 2, taken from Stock and de Veen (1996).

implemented by local administrators, for whom social protection considerations relating to the distribution of the PWP wage outweigh objectives relating to asset delivery.

Social protection performance can also be undermined by the selection of inappropriate performance indicators, irrespective of the institution responsible. Where process and output indicators are selected over outcome and impact indicators, and no baseline data on participants are available, incentives for effective PWP implementation and the promotion of social protection impacts are marginalised, in favour of the attainment of more limited and more easily measurable process indicators. This preoccupation with process over impact has been noted in PWPs internationally, and in the case of the South African EPWP this was described as a triumph of 'form over function' (LTF, 2006), with the agency responsible for programme implementation being more concerned with meeting the process or throughput targets in terms of days of employment and training offered, against which their performance was measured, than with assessing either the direct or indirect social protection impact of programme participation.

In these ways, institutional and management modalities can serve to shift the relative importance of coexisting objective sets, reduce accountability, and undermine incentives for effective (in terms of social protection outcomes) programme implementation.

3.4 PWP and Social Protection Conclusion

PWPs may have a range of diverse direct and indirect social protection impacts which are fundamentally governed by the appropriateness of the type of PWP selected in relation to the particular labour market context in which it is implemented. A range of contextual, design and implementation factors can affect the social protection performance of a programme, with some programmes which are nominally concerned with social protection provision, for example, prioritising asset construction over sustained welfare benefits during implementation. To be effective, PWP design needs to take into consideration the key factors outlined above, and intended to form a significant component of national social protection strategies, PWPs must provide adequate levels of coverage. PWP design also needs to include appropriate incentive structures, and to ensure that implementing agencies have sufficient institutional credibility to ensure that they are able to coordinate and promote

integration across the range of ministries and other players implied in the implementation of a PWP. Appropriate PWP design is critical in determining the eventual social protection outcome, and a mismatch between the labour market context and the type of PWP selected can severely undermine the social protection benefits experienced by participants. These issues of programme design and programme objectives are explored in detail in the following chapters in relation to the vectors through which social protection benefits may be conferred.

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4 THE SOCIAL PROTECTION EVALUATION OF PWPs

Having developed a typology of PWPs in chapter two, and explored the various objective sets associated with PWP performance, including both those which contribute directly to social protection outcomes, and those whose contribution is more etiolated, the previous chapter reviewed how different types of PWPs can deliver social protection outcomes in differing labour market contexts, and the design considerations which influence potential social protection outcomes, and this chapter now reviews the question of PWP performance evaluation. This chapter focuses on the international literature on PWP evaluation and questions the adequacy of the tools which are currently in use for making an empirical assessment of programme performance in terms of social protection impact.

The assumption underlying much of the international literature relating to PWP evaluation norms, is that it is appropriate to evaluate PWPs primarily in terms of cost effectiveness. It is useful to recall that a cost effective action may be defined, at the simplest level, as one which is 'economical in terms of the goods or services received for the money spent'⁴⁷, having both a cost and an output component. This chapter identifies major problems with both components, with indicators of both cost and impact being loosely and inconsistently conceptualised and calculated. This chapter argues that these empirical problems are indicative of a more fundamental question of relating to programme incidence, which should be central to any evaluation of the social protection performance of a given instrument, but is overlooked or oversimplified in much of the literature relating to public works. Moreover, it is argued that the poor definition of programme objectives, or the inclusion of a plurality of objectives which are not adequately or explicitly prioritised can contribute to further confusion regarding the ascription of programme failure or success.

4.1 PWP Cost Effectiveness

In the PWP discourse, PWP cost-effectiveness is assessed on the basis of the cost of aggregate employment created, with the employment created either considered an end in

⁴⁷ Retrieved in February 2008 from: <http://www.answers.com/topic/cost-effectiveness?cat=biz-fin>.

itself, the ultimate outcome, where employment creation is the primary objective, or a proximate outcome on the basis of the assumption that other desired benefits will accrue from the provision of that employment (for example, employment created is instrumental in delivering social protection benefits or reducing poverty). Central to such cost effectiveness evaluations are the key issues of cost and impact, inasmuch as they relate to employment created. This chapter critically reviews these issues of cost and impact in terms of the three main approaches used in PWP evaluation: i) calculation of the cost per job created, ii) the proportion of total programme cost allocated to labour, and iii) the cost per unit of income transferred to participants. All three approaches are adopted in the literature in an attempt to establish common performance indicators which can render programme performance comparable, facilitating analysis and comparison of PWP performance nationally and internationally.

4.2 Cost per Job Created

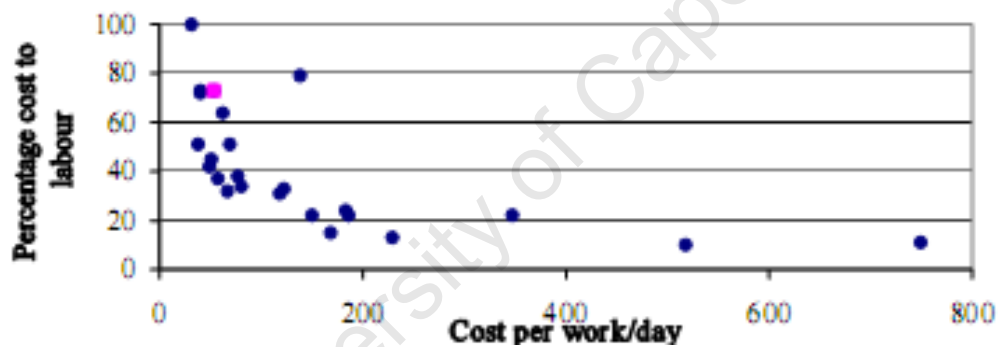
In order to assess the cost per job created, it is necessary to determine the amount of employment created, and then to analyse this in the light of the programme budget. This requires two sets of information; the quantity of employment created and the cost of creating it.

Determining the amount of work created in a PWP for comparative purposes requires a definition of the terms 'work created' or 'employment'. Across the literature a range of different units of measurement have been used to quantify the amount of employment created through PWPs, including 'jobs', 'employment', 'workdays' and 'person years' created. The term 'jobs created' is frequently adopted in the PWP literature (see, for example, Adato *et al.* (1999) with reference to South Africa), but such terminology is problematic in that it gives no indication of the nature of the employment created (duration of employment, short or long term, part or full time, etc.), rendering any attempt at an analysis of programme performance, or cost effectiveness comparison between programmes problematic. Consistent and quantifiable terminology is required to facilitate meaningful PWP performance analysis. This has been addressed in some of the international literature, notably that which is linked to the World Bank, by the adoption of 'workdays created' as the conventional unit of measurement of PWP performance (see Ravallion (1998); Subbarao

(1997)). The reductionism of the concept of ‘workdays created’ is itself problematic inasmuch as the nature of the employment created can impact significantly on the social protection outcome; nevertheless, this approach does facilitate some degree of international performance comparison, in the absence of any alternative consistent descriptive framework for PWP employment performance.

The cost of employment is conventionally measured by dividing the total PWP cost by the amount of employment created (however defined). An example of this approach is the analysis carried out by Adato *et al.* (1999), who calculated the cost per workday of 101 PWPs implemented as part of the national Community Based Public Works Programme (CBPWP) in the Western Cape Province in South Africa during the late 1990s (see Figure 4.1).

Figure 4.1: Western Cape Cost/Workday and Labour Percentage of Total Cost



Source: Derived from Adato *et al.* (1999:200).

Adato *et al.* found an extremely wide distribution of costs ranging from R40 (US\$7) for the Working for Water programme to R183 (US\$30) for community-based programmes, R229 (US\$37) for National Public Works pilot programmes, and R749 (US\$123) for programmes in the transport sector⁴⁸(1999 prices).

4.3 Percentage of Total Costs Allocated to Labour

Adato *et al.* also calculated the percentage of total programme costs allocated to labour by estimating the cost of the wage transfer to participants as a proportion of total programme

⁴⁸ Dollar values calculated using the June 1999 exchange rate of US\$1=R6.11.

cost. This is also illustrated in Figure 4.1, where the percentage of total costs allocated to labour in the form of wages ranges from 73% to 11%, decreasing as the cost per workday increases (*ibid*)⁴⁹. These findings are of interest as they indicate that simultaneously there can be a significant range of cost per workdays provided through a PWP, even within a single geographical area, and a single national programme, with the most costly programmes absorbing up to 89% of workday creation cost in non-labour expenditure⁵⁰. The most efficient programmes in terms of the cost of employment provision, with low cost per workday and a high percentage of total cost transferred as wages, fall in the upper left-hand quadrant of Figure 4.1.

Such analysis of cost per workday and labour as a percentage of total cost over a range of programmes is almost unique in the PWP literature, as it is rare to have credible and comparable data on either programme performance in terms of employment created, or programme cost. It is also particularly unusual to have comparable data for a range of programmes in a single location. A recent study which attempted to carry out a cost-effectiveness analysis of a range of PWPs in Malawi and Zambia highlighted the impossibility of gathering comparable basic data on total PWP cost from the main national and international agencies operating PWPs in the country, despite exhaustive attempts (White and McCord, 2006). For the great majority of PWPs, data about the structure of employment created, the number of workdays created, the wage level and administrative and management costs, are not available and hence, the proportion of programme cost allocated to wage transfer and management/materials cannot be calculated with any degree of confidence. This concern was highlighted by Devereux and Solomon in their 2006 review of international employment creation programmes:

⁴⁹ The percentage cost of material inputs in a public works programme plays a key role in determining the proportion of programme costs being transferred to labour; the low material input costs in the Zibambele programme account for the high proportion of programme funds being transferred directly as wage costs.

⁵⁰ Discrepancies in the wage structure of these programmes (with wages ranging from R29 to R82 a day (US\$5 to US\$13), have implications in terms of equity and labour unrest as well as cost effectiveness, and indicate that wage-setting mechanisms within public works programming need to be explored further.

‘... there is a dearth of detailed disaggregated information on job creations [sic] costs, partly because the management costs are usually hidden in regular government administration.’ (2006:6)

These concerns render analysis of the cost effectiveness of PWP and programme comparisons on this basis problematic.

4.4 Attempts at International Comparison: Cost-Effectiveness Ratio Analysis

A significantly more sophisticated appraisal framework for considering the question of PWP cost effectiveness has been developed by Ravallion (1998). This framework attempts to generate internationally comparable analyses of the cost-effectiveness of PWPs by calculating programmes’ ‘cost-effectiveness ratios’, which are estimated by modelling the net gain to poor workers arising from a PWP, and then by deriving from this ratio the unit cost of a transfer to the poor (Ravallion, 1998; Subbarao, 2001). This model represents a significant advance on the approaches discussed above, taking into account a number of critical factors which influence the social protection benefit, and which extend beyond the basic labour intensity of the intervention (percentage of costs to labour). Key considerations included in the model are an assessment of the proportion of the wages which go to poor workers, a calculation of the net wage gain (based on a consideration of the cost of participating, in terms of income forgone, which is derived on the basis of expected earnings outside the programme and the probability of finding such work), indirect benefits accruing to the poor when assets are created in their neighbourhoods, and the potential rate of cost recovery which might accrue to the state from the asset created.

While the Ravallion approach offers greater insights than a simple cost per workday analysis, it is still dogged by a number of significant data and conceptual limitations. In terms of data constraints, the main problems remain the paucity of adequate and comparable basic cost data, and the lack of adequate data in most programmes to populate the targeting and impact components of the model, resulting in a reliance on heroic assumptions to populate key components of the methodology, particularly with regard to incidence (the effectiveness of poverty targeting and extent of leakage to the non-poor), the accuracy of assumed local unemployment rate, the benefit cost ratio (the extent to which projects produce benefits sufficient to cover their costs), and the current and future value of the asset created to poor

participants), as discussed in McCord (2003). Changes in any of the assumptions informing these components of the model could significantly alter the model's conclusions, and the number of programmes which could be modelled without recourse to assumed values in these areas is extremely limited. On this basis, it is argued that the meaningfulness and credibility of this type of cost-effectiveness analysis is severely constrained and of limited use in the development of an empirical evidence base to inform the relative performance of PWPs, and their selection as appropriate instruments for social protection (or other) purposes.

Subbarao takes the criticism further by highlighting a number of conceptual, rather than empirical limitations to this approach:

‘A word of caution is needed in interpreting the cost-effectiveness calculations cited in this paper [the Ravallion framework outlined above]. These calculations take into account only the transfer benefits conferred to the poor. The risk benefits to consumption smoothing are rarely factored into the calculations of cost-effectiveness. [...] Another limitation of cost-effectiveness calculations is that only the direct transfer benefits are factored into account. Indirect benefits of workfare programs in terms of short- and medium-term impacts on the rural market wage rate and the (indirect) social beneficial impacts of female empowerment have not been taken into account in the available estimates of benefits and costs.’ (2001:viii)

In relation to the three vectors identified in the previous chapter, it is clear that while the approach attempts to address both wage and to some extent asset benefits, the value of future gains from the assets created is a derived variable, rather than being empirically calculated on the basis of *post hoc* evaluation, and that the work experience vector is not included in the model. More fundamentally, the Ravallion model stops at the point of calculating the financial cost of a unit of transfer to the poor, rather than assessing the social protection meaning of the transfer, in terms of its impact in reducing the poverty gap experienced by participants, or the function of the transfer in terms of promoting any of the three possible social protection states identified in chapter three.

4.5 Summary of Critique

The key failings inherent in the dominant approaches discussed above may be summarised as the focus on proximate (instrumental) rather than ultimate outcomes, the requirement to

make heroic assumptions regarding the value of the asset to the community (in the case of the Ravallion framework), the lack of analysis of actual impacts (wage, asset and skills) and social protection outcomes, and the failure to examine incidence. The approaches fail to take account of the diversity of PWP design, with particular reference to the nature and quality of employment offered; factors which, as has been argued above, have a significant bearing on programme impact. The above approaches are weak in terms of evaluating impact and can establish only certain cost components, and these only to the extent that the data are credible and complete. This situation is further compounded by profound data limitations and inconsistencies which render cross programme comparison problematic.

There is a fundamental lacuna in the literature and the dominant evaluation methods adopted; while the 'cost effectiveness' of a programme may be established, inasmuch as the limitations of the three approaches allow, its poverty reduction or social protection impact is not included in conventional analytical approaches. Instead these approaches focus on: i) the cost of transferring one unit of income to a household, or ii) the cost of creating employment, both of which are process rather than outcome indicators. For this reason it is argued that no significant conclusions regarding a programme's social protection effectiveness can be drawn from the three approaches discussed. The implication of this is that even the Ravallion framework is an incomplete appraisal mechanism, which does not offer adequate insights into cost-effectiveness in terms of the provision of social protection, in as much as it does not include the poverty alleviation or social protection impact of an intervention, focusing instead on the cost effectiveness of the process of the transfer itself, a proximate, rather than ultimate outcome. In the Ravallion approach the only reference to impact other than the quantity of employment created is the assumed current and future benefits of the assets created, , but the estimation of these benefits is in most cases based on the adoption of heroic sets of assumptions rather than empirically determined. Addressing this failing is critical for meaningful appraisal of the social protection impacts of PWPs, given the explicit anti-poverty objective of most schemes.

4.6 Factors Determining Cost Effectiveness

The key problems with the approaches outlined above may be summarised as follows: i) they do not take into account inconsistencies in cost data, ii) they do not assess outcomes in

terms of programme-specific objectives, and ii) they fail to take into account a variety of intermediating factors impacting on cost effectiveness, with the consequence that the resulting analysis may be neither internally rigorous or meaningful, nor comparable with other programme analysis. The core factors which would need to be included in a more meaningful assessment of cost effectiveness are discussed below.

Objectives

Firstly, a PWP's cost effectiveness can only be assessed against the extent to which it achieves its objectives (Gottschalk, 1997), and to this end clarity on the explicit objectives of a programme and identification of the relative status of primary and subordinate objectives is critical, although often absent in both programming and the literature. Given the multiplicity of PWP design options, and the diversity of potential PWP objectives, set out in chapter two, the focus on job creation *per se* which dominates the literature as the measure of PWP performance, rather than performance against the other objectives which may be included in a PWP, either as direct objectives themselves, or proximate objectives contributing to social protection, is problematic. An illustration of the implication of the wide divergence in programme objectives for cost effectiveness analysis, and programme evaluation overall, is offered by comparing the NREGP in India with Ethiopia's PSNP and South Africa's EPWP. Within the policy rhetoric there is no expectation of 'graduation' from the NREGP, whereas within the PSNP and EPWP there is an anticipation that sustained livelihoods benefits will accrue to participants, and lead to sustained 'transformative social protection' outcomes after a limited period of employment in the programme. The NREGP is conceptualised as providing social protection through the provision of paid employment, as required, in order to prevent the distress selling of assets, etc., with no expectation that participants will experience transformative social protection benefits or graduate out of poverty as a consequence of programme participation. On this basis the programme offers repeated employment, up to a maximum of 100 days per annum, and the fact that the same participants might return to the programme each year would represent a success in terms of the programme's objectives, inasmuch as it was offering repeated support to those in need. Such a scenario would, however, represent a failure in terms of the objectives of the PSNP or EPWP whose objectives explicitly include graduation by participants to formal or

informal sector employment, through the process of transformative social protection resulting from PWP employment⁵¹. On the basis of the Ravallion framework each programme would be equally ‘successful’ if the cost per job created were equal, irrespective of the differing relative priorities of the two programmes’ respective objective sets and anticipated social protection function, and performance against these objectives. This illustrates the fundamental importance of taking a PWPs’ explicit objectives into account when attempting to assess cost-effectiveness, and programme performance overall.

The analytical approaches outlined above share the common assumption that the ‘creation of employment’ is *de facto* an ultimate objective, an end in itself, whereas within the social protection discourse, employment creation has an inherently instrumental function. If a programme’s objectives are limited to the promotion of aggregate employment, rather than the provision of social protection, the premise of these evaluation approaches may be appropriate. However, in terms of a social protection objective, creating employment is only of value in as much as it serves to reduce poverty, as ‘work does not necessarily guarantee a way out of poverty’ (Øyen and Wilson, 1999:207). This insight has been elaborated in recent work by Wood, who has developed the concept of ‘adverse incorporation’ (Wood, 1999). This concept implies that while workers may be included in the formal or informal labour market (or in a PWP), inclusion (set in contrast to the concept of ‘social exclusion’) may not necessarily guarantee adequate social protection outcomes, see du Toit (2004).

An assessment of the impact of PWP participation in terms of the social protection impact on participants is essential if the success of the programme is to be assessed against social protection objectives. However, social protection impact is often omitted in the PWP evaluation literature, even where programmes have explicit social protection objectives. Social protection impact monitoring was not, for example, included in the Zibambele programme, or any other programmes within the South African EPWP, nor most PWPs internationally, despite their (direct or indirect) social protection objectives. It is proposed

⁵¹ Under the NREGP, households can reapply for EGS employment as long as they wish, while under the EPWP, participation is limited by statute to a maximum of two years, and under the PRSP it is limited by design to five years.

that this omission occurs in part due to the assumption that employment provision, irrespective of quality, will have a significant impact on social protection; an assumption which, as has been argued above, is not supported from either a theoretical or empirical perspective.

Actual Cost

In order to assess cost effectiveness, it is essential that the actual costs of a PWP are known, but this in itself is problematic as there is no consensus on the appropriate set of costs for inclusion in PWP analysis, rendering any attempt at comparison, either nationally or internationally, problematic. As a consequence, costings tend to be idiosyncratic. There are several factors underlying this problem, relating to the complexity of PWP implementation.

In part, the cost-data problem reflects the fact that PWPs are institutionally complex, often crossing several funding and expenditure jurisdictions as a result of the inherent complexity of PWP design and implementation. As a consequence of this complexity, there are a considerable variety of cost centres under which the diverse set of activities requiring PWP expenditure may be located (local government, Department of Public Works, Department of Planning, Department of Labour, Department of Education, NGOs, QUANGOs (Quasi Non-Governmental Organisations, which are state-funded organisations outside the normal governmental structure, and may be responsible for PWP implementation), PMUs (donor-funded Programme Management Units, which implement PWPs in structures which are parallel to those of government), donors, advisors or consultants.)

The costs of some of the diverse activities required for PWP implementation are often excluded from the PWP budget itself; PWP budgets frequently exclude costing of the administrative management costs of PWPs, particularly when implementation costs are incurred toward the bottom end of the state hierarchy, at district or village level, and where there is a general acceptance that the implementation tasks should be performed without budgetary allocations or incentives, even though they may be additional to the existing scope of responsibility, and fall to already overburdened local officials (UK DFID, 2003a; Karuri *et al.*, 2008). In this way, many PWPs imply an additional set of work activities representing an unbudgeted responsibility, particularly at the local level, where local government is often

required to play a central, but unfunded, role in implementation (as in the case of the EPWP in South Africa and MASAF in Malawi (Karuri *et al.*, 2007). As a result, when programmes are costed, the budget lines included as 'PWP' line items can vary greatly, and there may be potentially sizeable hidden costs. The extent to which these are or are not included in estimates of programme cost can have a significant impact on apparent cost effectiveness results. In this context it may be difficult to distinguish variation in cost effectiveness from noise. Often donors and implementing agencies themselves have difficulties in assessing the actual total cost of PWPs, including implementation, given the extent of the unknown real costs of local government management, technical design and monitoring, material costs, contractor costs, etc. A recent attempt by DFID to make such a costing in Zambia and Malawi in order to compare the actual cost of the provision of social protection through PWP and alternative instruments such as social grants was ultimately abandoned due to the impossibility of garnering comparable or meaningful PWP data in either of the countries concerned (White and McCord, 2006).

This problem also reflects the fact that different types of PWPs may be differently conceptualised in terms of their budgets. For example, WFP and USAID do not tend to monetise the food component of food-based PWPs (FFW programmes) with the result that the wage component in many PWPs implemented or supported by these agencies is considered 'free', rather than reflecting actual costs in terms of purchase value, shipping, storage, etc. For donors such as WFP, the disaggregation of specific programme costs, and attempts to monetise the value of the in-kind payment in PWPs is both technically problematic, and politically sensitive (*ibid.*). The consequence of WFP and other donors' inability to share budgetary data on the true cost to the donor community of FFW programmes, in terms of food purchase, transportation or storage (or factoring the cost of downstream implications of massive food importation on the local economy and food producers), is a lack of transparency regarding the true cost of PWPs utilising donated food as the basis for the payment.

The lack of any norms or conventions governing the selection of costs which should be included when assessing programme cost, is compounded by problems of data availability, a lack of transparency regarding which costs have been included, and how these costs are

derived in each instance. This has implications for any attempt to assess the cost effectiveness of individual programmes, and renders cross PWP comparison, and any kind of cost effectiveness across different social protection instruments, problematic. Together, these factors risk undermining the reliability of much current PWP comparative cost assessment analysis.

Incidence Data

Socio-economic data to indicate incidence are critical in any attempt to assess the effectiveness of any PWP in terms of social protection or poverty-related objectives. However, in most PWPs, particularly those offering short-term employment, or developed in response to an emergency, e.g. type A, programmes, even baseline socio-economic data are rarely gathered on programme participants, as argued by Ravallion:

‘For safety-net interventions, such as workfare programs, that have to be set up quickly in response to a macroeconomic or agro-climatic crisis, it is often unfeasible to delay the operation in order to do a baseline survey.’ (2003:8)

However, even large-scale programmes which have not been developed under emergency conditions, and which have had significant international guidance, typically have not gathered baseline socio-economic data on participants; neither the PSNP in Ethiopia, nor the CBPWP or EPWP in South Africa, nor the MASAF PWP in Malawi gathered baseline data from which programme incidence could be assessed. In most cases, it is simply assumed by implementing agencies that PWPs’ ‘less eligibility’ characteristics (the work requirement and low wage), will be sufficient to ensure that those for whom the programme was intended are actually participating in the programme. There is little evidence to suggest that this assumption is robust, and where tested *post hoc*, significant inclusion errors are found in many PWPs (Barrett and Clay, 2003; Devereux and Solomon, 2006; Lembani and Mandala, 2006). The absence of incidence data for most PWPs renders cost effectiveness impossible to assess for programmes in which objectives are related to poverty reduction or social protection impacts, rather than simply the promotion of aggregate employment.

Coverage

If assessing the cost effectiveness of PWPs as components of a wider national social protection strategy, it would be necessary to include analysis of various dimensions of coverage, including geographical coverage, scale of operation, and universality and rationing, in addition to incidence (including consideration of targeting and inclusion and exclusion errors), in order to make an assessment of cost effectiveness which would be adequate to inform the policy choice. Unusually, in their analysis of the cost effectiveness of a PWP-based approach to poverty reduction in India, Murgai and Ravallion explicitly take account of issues of PWP coverage and targeting and the resultant exclusion and inclusion errors. Taking these factors into account they conclude that the NREGP actually represents a significantly more expensive way of providing social protection to the poorest than a grant-based alternative, questioning the cost-effectiveness of a PWP-based response to the problem of rural poverty (Murgai and Ravallion, 2005).

Quality of Employment

The quality of the 'employment' created in a PWP is also a critical determinant of the impact of the employment created. However, data on employment quality (duration of employment, nature of employment (full or part time), flexibility of working hours, predictability of payment, etc) are absent from the cost-effectiveness analysis discussed above. This issue is particularly piquant in relation to the ILO's PWP discourse, with the ILO promoting 'decent' employment, while also promoting PWP employment, which tends in many instances, including employment in the ILO's own EIIP, to fall short in significant measure from the terms of employment conditions required under 'decent work' (McCord, 2007c).

The question regarding the quality of jobs, and how different kinds of jobs impact differentially on poverty has also been extensively explored by the ILO within the 'decent work' debate (see, for example, ILO (1999)). The ILO has argued that '“A job at any price” is not a strategy for a sustainable reduction in poverty' (ILO, 2003:36), recognising that the quality of employment is a significant determinant of the potential for a job to confer income security and hence to contribute to sustained poverty reduction. The ILO argues that 'decent work is the quality road to poverty reduction' (2006: v), and defines 'decent work' as:

‘... productive work in which rights are protected, which generates an adequate income, with adequate social protection. It also means sufficient work, in the sense that all should have full access to income-earning opportunities. It marks the high road to economic and social development; a road in which employment, income and social protection can be achieved without compromising workers’ rights and social standards.’ (1999, no pagination)

Clearly there is a significant tension between the decent work identified by the ILO as necessary to contribute to sustained poverty reduction, and the quality of work offered in most PWPs. In all PWPs, data on the quality of employment created are relevant, since a programme offering a single short-term episode (type A, C or D) may have the same Ravallion cost-effectiveness ratio as one offering sustained ongoing employment (type B), whilst actually offering very different employment ‘products’ with divergent outcomes in terms of poverty reduction and social protection. From the ILO statement above, it is clear that types A, C and D PWPs are unlikely to conform to the definition of ‘decent work’, with the associated benefits.

A key factor underlying the differential quality and impact of type A, C and D PWPs on the one hand and type B PWPs on the other is the dimension of employment duration, which is missing from the conventional conceptualisation of PWP employment adopted in programme evaluation. This is a critical omission which fails to recognise the impact of the duration of transfer receipt in determining both the consumption smoothing and the accumulation consequences of PWP participation, both of which are likely to impact significantly on social protection outcome.

Assets

The PWP work conditionality necessarily entails additional costs above any administrative costs common to both PWPs and alternative instruments, since the creation of assets and services requires significant additional material and management input costs, this is referred to as the PWP cost premium in the text below. The work conditionality also implies additional benefits in terms of the assets created, which may have a range of direct and indirect social protection benefits. For this reason an assessment of the cost effectiveness of a PWP needs to take into account not only the additional cost of asset creation, but also the value of the assets created, and an analysis of to whom economic benefits resulting from

those assets accrue. This is necessary if meaningful cost-effectiveness comparisons are to be made between PWPs, or between PWPs and alternative instruments. However, as we have seen, an analysis of the value of assets created, and the incidence of asset benefits, is absent from the commonly used cost-effectiveness approaches. Even in the Ravallion framework, the value of assets created is not empirically ascertained on the basis of the quality, appropriateness or sustainability of assets produced over time (be they services or physical infrastructure⁵²). The time dimension is critical here, with most PWP evaluations ceasing at the point at which infrastructure construction is completed, frustrating any aspirations to assess the value of the asset created over time.

It would be economically justifiable to spend more per unit transferred through PWPs, compared with alternative social protection instruments, if the assets created were of a current *and* future value which was commensurate with the premium (how a ‘commensurate’ value would be quantified is potentially an area of considerable debate, which will not be explored here⁵³). There is a serious problem of data availability in this area, but notwithstanding this problem, the general omission of this issue from the PWP cost-effectiveness literature is a major problem, representing PWPs as though they are closed systems, and largely disregarding the additional cost premium and unknown benefit impacts of the assets created. As a result, any conclusions regarding the ‘cost effectiveness’ of PWPs, or the desirability of PWPs over alternatives, remain highly compromised.

4.7 The Real Value of the Wage Benefit

Most evaluations adopt the PWP wage income (the gross income) as the value of the transfer to participants, and it is only in recent years that it has been acknowledged, although

⁵² Either physical or social infrastructure may be provided through a PWP, with the former referring to the physical assets conventionally created through PWPs (such as roads, bridges, irrigation systems), and the latter referring to social service provision in the form of home based care for those affected by HIV/AIDS, or the provision of Early Child Care and Development (ECCD) services, as in the case of the EPWP in South Africa (EPWP, 2004a).

⁵³ Factors which would need to be taken into consideration would include relative costs of construction/service provision/maintenance using labour rather than capital-intensive approaches (this will be in part a function of the relative labour and capital costs in any given context), the quality, sustainability and relevance of the asset created, rate of depreciation of the asset, implementation of maintenance plan, utilisation and benefit from the asset by different socio-economic groups, etc.

still not universally operationalised, that the wage transfer may not be synonymous with the cash value of the transfer to recipients (see Van de Walle (1998)). In the social protection literature, a cash transfer is assumed to have a value to the participant which is functionally equivalent to the value of the transfer, on the basis of the assumption that access costs (such as travel, procurement of ID, registration, and any 'emoluments' paid to gate keepers), are minimal and diminish over time. However, in the case of a PWP, the net income value of the PWP wage has been found to be significantly below the gross value in all instances where it has been monitored, once income forgone has been taken into account. Typically, income forgone, based only on an assessment of wage labour opportunities forgone, reduces the net value of the PWP wage to 50% of the gross PWP wage (Jalan and Ravallion, 2003). While the inclusion of income forgone in a calculation of the real value of the PWP wage is important, this represents only one of a significant number of potential monetary and non-monetary costs of PWP participation, which most PWP analysis fails to take into account. Pellisery (2008) identified a range of costs relating to non-wage domestic and subsistence activity forgone, transport, and the high cost of securing selection in the context of a highly rationed resource, as a result of the rents demanded by those controlling access to PWP participation, these costs are explored in detail in the following chapter. Although frequently overlooked, non-monetary costs may be significant in terms of the social, developmental or livelihoods impact of reduced domestic (for example, childcare) or subsistence activities, and in some cases extend to the demand for sexual favours in return for PWP selection.⁵⁴ While this demand for 'emoluments' in return for PWP selection is symptomatic of a discretionary approach to rationed PWP employment, and may be contrasted with a demand-driven, rights-based approach to social protection as for example in the National Rural Employment Guarantee Programme (NREGP) in India, Pellisery's research, outlined above, indicates that even in employment guarantee programmes such as the Maharashtra Employment Guarantee Scheme, there is still space for the extraction of rents in return for programme inclusion (Pellisery, 2008).

⁵⁴ G. Preston, Director of Working for Water, South Africa, 2005, pers. comm.

Together these considerations could potentially render the real cost of participation significantly higher than generally accepted, rendering the net value of the transfer lower than generally accepted in the literature. In the light of this, the issue of the net wage, and the assumed benefits thereof, remains problematic in the cost-effectiveness discourse, rendering even reductionist cost-effectiveness analysis, focusing exclusively on the employment and wage benefits, contestable. The largely unproblematised adoption of a PWP wage without taking these cost factors into consideration remains a significant weakness in the current evaluation literature.

Notwithstanding these concerns regarding how an appropriate real value of the wage might be determined, after the costs of participation are considered, the fact remains that the wage impact of PWPs (in terms of both transfer and stabilisation benefit) is critical in terms of reducing the vulnerability of poor households in the context of chronic poverty⁵⁵. If the impact of PWP on social protection is to be adequately assessed, the impact of the wage, in terms of its function within the household economy needs to be included in the appraisal framework, in addition to the net value of the wage.

Ravallion acknowledges that wage benefits from PWPs can be significant, but his work focuses primarily on the analysis of PWP transfer benefits, rather than their 'insurance' function in the context of chronic structural unemployment. This issue is addressed in part in Datt and Ravallion (1994a) which adopts a longitudinal approach to examine the poverty impact of PWPs, focusing on an income-based definition of poverty, and time allocation models. While this expands the conventional programme appraisal scope, it remains limited to an income-based conception of poverty, rather than a multidimensional approach, which would take into account the impact of the PWP wage transfer on household welfare, and any other attendant benefits (potentially the assets and skills development vectors) through which the social protection impacts of a PWP may be transmitted more broadly. However, the Datt and Ravallion analysis is based on a type B programme, offering ongoing employment, and focusing on examining participating households over time during an

⁵⁵ For a discussion of the role of consumption smoothing and economic shocks see Leibbrandt and Woolard (2001).

extended period of PWP employment rather than examining longitudinal impacts extending post implementation in type A programmes typical of those implemented in sub-Saharan Africa. To assess the social protection impact of a PWP in line with this critique, significant additional contextual, programme performance and participant socio-economic data would be required, as well as post programme data to clarify cost, impact and incidence.

For most PWPs, particularly those conforming to types A, C and D, monitoring and evaluation processes at best lag behind programme implementation (this problem is discussed in relation to diverse programmes in South Africa in Adato *et al.* (1999) and Karuri, *et al.* (2007)), or, in the case of post programme impact analysis, are not included in programme design at all (Ravallion, 2003). For most PWPs, no socio-economic data are available on programme participants.

4.8 Summary of the Fundamental PWP Evaluation Problems

Most importantly, the conventional approaches to PWP evaluation do not integrate impact into their models, in terms of the ultimate social protection outcome of the employment generated, the wages and skills transferred, or the assets or services created. The three fundamental limitations to the existing evaluation literature may be summarised as: i) evaluations tend not to take into account all three vectors of potential benefit transmission, focusing almost exclusively on the gross, or at best crudely defined net, wage transfer, ii) evaluations do not necessarily assess performance against objectives and frequently consider proximate rather than ultimate outcomes, and iii) evaluations typically cease to examine programme impacts at the time at which wage disbursements are completed. These limitations represent a significant research problem, in terms of assessing the sustained social protection outcomes of PWP implementation. The evaluation problem has been accurately described in the literature as:

‘The impact of any intervention can be defined as the ‘difference between the outcome indicator with the program and its counterfactual value for participants in the absence of the program’ (Galasso and Ravallion (2003:15), cited in Devereux and Solomon (2006:24)).

In the case of PWPs, this process for determining impact is rendered problematic in most cases by both the limited or partial nature of the outcome indicators selected for evaluation,

and the absence of adequate baseline data to facilitate the identification of an appropriate non-treatment group as a counterfactual. On the basis of an international PWP literature review, Devereux and Solomon contend that:

‘Very few impact assessments of employment programmes have been conducted that follow this [Galasso’s] rigorous approach. In particular, most evaluations tend to assess the direct impacts of the programme on participants in the absence of a non-participant control group, which makes it impossible to isolate programme impacts from the counterfactual.’ (2006:24)

They also problematise the content of current PWP evaluation, stating that longer-term benefits accruing from assets created, training and skills transfer need to be considered in addition to PWP wage benefits, arguing that:

‘... a programme’s overall success must assess the extent to which it is able to transfer all these benefits.’ (*ibid*, 2006:24)

Devereux and Solomon confirm the argument that the current forms of PWP performance assessment are inadequate inasmuch as they understate the benefits of PWPs, by focusing almost exclusively on the extent of employment created, and in some cases also the cost of the wage transfer. Paradoxically, at the same time such assessments can overstate the social protection performance of PWPs, in the sense that they judge PWP success primarily in terms of employment created, irrespective of any critical consideration of the social protection objectives of the PWP, and the extent to which the achievement of the proximate goal of employment contributes to these objectives.

4.9 Conclusion

Evaluation of the social protection performance of PWPs is limited, tending to focus on the question of cost effectiveness rather than more complex and fundamental questions of impact, taking into account the range of potential vectors of impact, a temporal dimension, and also the potentially significant beneficiary costs associated with programme participation. The conventional approaches to PWP evaluation can establish cost effectiveness only to the extent that the data are credible and complete, and do not offer insights into i) the object of the cost, i.e. the purpose of the intervention, and what is actually being achieved in return for the cost, or ii) by whom the benefits are enjoyed. Moreover, as elsewhere in the PWP

corpus, the literature on PWP effectiveness tends not to make clear distinctions about the type of PWP under discussion, or programme objectives, leading to a pervasive problem of comparing non-comparable programmes with differently prioritised sets of objectives and widely varying design components.

Given these limitations, the credibility of current cost effectiveness analysis is open to question, particularly analysis which attempts to include a comparative dimension. The results of much of the current cost effectiveness literature relating to PWP performance may not be generalised across the genre, and may not even offer meaningful insights into individual programmes, rendering analysis of the cost effectiveness and efficiency of PWPs as a social protection (or other) tool, highly problematic, and thereby undermining the potential for evidence-based social protection instrument selection.

Even using the more complex Ravallion approach, in the absence of data on a range of critical issues, it is not possible to confirm whether nominally cost effective social protection oriented PWPs are actually having a significant positive social protection impact on participants, or whether incidence reflects the intended poverty targeting goals (see McCord (2003) for a discussion of the limitations of the Ravallion approach in relation to the South African Zibambele programme). The conventional analytical approaches fail to examine the meaning of the employment provided in terms of the functioning of the three vectors, wage, skills development and asset creation, or their respective social protection impacts. The implication of this is that there may be a methodological 'blind spot' in terms of critically assessing the impact of PWPs and appraising the resulting social protection outcome over time, and an equally problematic situation regarding programme cost. This renders both PWP 'cost effectiveness' analysis and also PWP evaluation as currently conceived extremely partial and inadequate instruments to judge programme performance or inform policy choice, particularly with reference to the social protection function of PWPs.

Somewhat singularly in the literature, Devereux and Solomon confirm this analysis arguing that:

'An exhaustive literature search revealed a surprising dearth of detailed and credible evidence on the impacts of employment creation across the world. We can only speculate on the reasons for this. One likely factor is that the primary objective of

employment creation programmes is to provide low cost jobs to large numbers of poor people. Accordingly, a common design principle is that a high 'alpha-ratio' should be achieved (ie as high a proportion of the total budget as possible should be transferred to workers as wages or rations). This leaves very little budget to allocate to a rigorous evaluation of impacts. Typically, the budget line item for M&E [...] is for supervisions of workers and monitoring progress against targets (such as number of jobs created) and work norms (such as kilometres of road constructed). The broader impacts of the programme on agricultural production, labour markets and so on are rarely prioritised or rigorously evaluated.' (2006:37)

It is in response to these criticisms highlighting the inadequacy of the existing literature that the potential and actual social protection performance of each of the three vectors are interrogated in detail in the following three chapters.

5 THE THREE VECTORS: WAGE

The previous chapter argued that existing approaches to PWP impact assessment and evaluation are limited inasmuch as they do not recognise the full range of potential sources of social protection benefits which were identified in chapter three (the three vectors: wage, skills and assets created), but instead focus primarily on the amount of employment created, and estimates of the net present value of the wage transferred. Chapters five to seven attempt to explore this lacuna in the literature by examining each of the three vectors in turn, analysing their potential social protection impact, reviewing the role that each can and does play in relation to the different types of PWP and range of PWP objective sets identified above.

This chapter explores the question of how the vector of wage might provide social protection benefits. The wage acts directly to alleviate poverty during a period of reduced income or livelihoods activity, but it is argued in this chapter that, in addition to this, the wage can also serve a risk management function, and in this way provide differing social protection outcomes. This analysis is consistent with the analysis of wage by Subbarao (1997), who divides the wage benefit into two components: the ‘transfer benefit’ and the ‘stabilisation benefit’. The transfer benefit is the direct function of the receipt of cash, food or in-kind goods into a household to increase consumption, and is generally perceived as the main benefit of the wage. Subbarao argues that the ‘stabilisation benefit’, which occurs through the provision of PWP employment when demand for labour is low, thereby facilitating consumption smoothing on the part of recipients, is a form of ‘risk benefit’ which represents an insurance function (*ibid*). Some argue that this function is at least as important as the transfer benefit to the poor (Dev, *op cit*). These dimensions of the wage impact are examined below in relation to the different types of PWP.

The value of the wage is also explored in relation to the poverty gap, as the size of the wage in real terms will affect the extent of transfer and stabilisation benefits. The determination of the real value of the PWP wage entails a discussion of the net value of the wage, taking into account both income forgone, and also the range of other monetary and non-monetary costs

implied by PWP participation, and the examination of the resulting net wage in relation to the consumption gap of participating households.

Finally, the issues which determine the selection of the wage in PWPs, and the social protection consequences of adopting wage levels on the basis of these considerations, are explored. These issues are examined below, drawing on empirical analysis from a detailed study of the Malawi Social Action Fund (MASAF) PWP (drawing on McCord (2004b) and Chirwa *et al.* (2004a)) and the Zibambele programme in KwaZulu-Natal (McCord, 2002), to illustrate dilemmas in the process of wage setting and the social protection consequences of the resulting wage choices.

The main argument outlined below is that the social protection function of the wage is contingent on the duration of the period of the wage transfer, and the wage level, and how these relate to the nature of the labour market crisis and the depth of the poverty gap experienced by participants.

5.1 The Labour Market Context and the Duration of the Wage Transfer

As discussed in chapter three, there is a critical relationship between the type of PWP selected, the wage level and the nature of the labour market context, in terms of a programme's likely social protection impact. In the context of acute or transient shocks, the economic and labour market function of a PWP is to promote short-term consumption smoothing during a period of disrupted access to income, particularly where the problem is covariate, and in this way prevent or reduce distress selling of assets. In this context, type A, C and D programmes offering a single short-term episode of wage transfer can offer a risk coping function, providing wage income in response to acute or transient shocks which occur as single, once-off periods of heightened vulnerability, resulting from some exogenous event.

While type A, C and D programmes may offer a wage which is sufficient to permit consumption smoothing in the short term, such a form of PWP employment (with its inherently limited period of wage transfer, which is accessible only on a once-off rather than repeated basis) is unlikely to result in sustained social protection benefits in the context of chronic unemployment, or repeated episodes of unemployment. Only if the wage level were

sufficiently high to allow significant accumulation during the limited period of employment would the wage vector potentially provide social protection benefits which would be sustained after the episode of employment was completed. However, there is no evidence in the literature of the occurrence of such accumulation within the context of such programmes, with immediate consumption being the dominant use of PWP wage income (McCord, 2003; Devereux and Solomon, 2006:25). Hence, in the context of chronic unemployment, it is not apparent that in a PWP intervention offering a single episode of employment, the wage will confer sustained social protection benefits. The key factor inhibiting the poverty-reduction performance of such PWPs in the context of chronic poverty and unemployment, is that where PWP employment is short term and wages are low, the potential for accumulation is limited and as a result, the intervention is unlikely to result provide preventive or promotive forms of social protection, but only protective social protection, and a temporary reduction in poverty. The only other way that a short-term episode of employment could offer sustained benefits would be if the assets created had a significant and sustained impact on livelihoods of participants, or if the skills-development benefits were sufficient to improve worker employment performance subsequent to PWP employment; however, neither outcome has been documented in the literature. In this context, workers are likely to remain poor after PWP participation, with PWP income functioning primarily as a temporary wage shock (see, for example, McCord (2004a) with reference to South Africa).

The ILO formally recognises the limitation of short-term employment in such contexts, arguing that employment on EIIP-type programmes may have only a temporary impact on poverty:

‘After 25 years of pioneering work in the promotion of employment intensive infrastructure investment, the ILO has learnt a number of important lessons. [...] labour-intensive investment can open doors for community development and provide a *temporary boost* to the incomes of people living in poverty, but sustaining progress requires linked action to promote longer term employment opportunities, for example in micro and small enterprises.’ (ILO, 2003: 44, emphasis added)

The ILO also argues that what is required to address poverty on a sustained basis is social security, which ‘enhances productivity by providing health care, income security and social

services' (ILO, 2001:42). According to this approach, 'income security', the aspect of social security conferred through employment, is a subset of social security, and is defined below:

'Income security is about living in a situation in which basic needs, such as food, housing, health care and education, can be secured in an uninterrupted way. This [...] requires having both an adequate and regular source of income;' (2006:9).

This indicates that the kind of employment required to contribute to social security, and by inference to deliver sustained social protection benefits, is employment which offers '*adequate and regular income*'. This analysis supports the argument set out above that, by definition, short-term type A, C or D PWP employment does not offer the form of regular income flow required to provide stabilisation benefits in the context of chronic unemployment. Hence, the critical determinant of an effective PWP in this sense is the matching of PWP duration with the duration of the labour market crisis. These findings are consistent with the international literature on PWPs, which highlights the importance of sustained employment for addressing the challenge of chronic poverty. Dev (1995) goes further, arguing that the sustained duration of wage income is more important than the gross value of the wage transfer, in terms of its social protection outcome. It is the risk insurance function of sustained employment which can offer a preventive or risk mitigation function, and potentially, although not necessarily, also enable the accumulation of assets such that promotive social protection outcomes could result.

If transformative social protection outcomes are anticipated, the critical need is for PWP employees to be able to acquire the 'minimum or threshold asset bundle that enables future accumulation' (Carter, 2004). Unless the poor can accumulate sufficient resources to pass a critical asset threshold, they are very likely to fall back into poverty (Carter and May, 1997; Carter, 2004). Hence, in any type of PWP where the objective is a 'treatment' of participants, such that they move out of reliance on external provision of social protection (a process sometimes referred to as graduation (Slater and Sultan, 2005)), transformative outcomes are contingent on an accumulation of assets (in the form of material, financial or human capital) such that participants are not dependent on ongoing PWP employment. This accumulation is partly a function of the duration of employment, and partly a function of the wage level in relation to the poverty gap, as will be explored below.

Devereux and Solomon noted the impact of employment duration on expenditure patterns, and the significant implications for investment decisions and capital accumulation:

‘Workers employed for less than one month spending their wages entirely on basic consumption,..., while others who were employed for longer [...] hired labour, purchased fertiliser and started or expanded small business enterprises’ (2006:25)

This insight is reflected in PWP offering ongoing employment in the form of EGS, type B programmes, in recognition of the need to adopt an appropriate type of PWP to match the chronic nature of the labour market problem and to provide an ongoing income. Such programmes are implemented in a small number of MICs, the foremost proponent of this approach being India, but are extremely rare in LICs. Evidence from the type B Zibambele programme in South Africa suggests significant benefits in terms of material and financial asset ownership, and the accumulation of human and social capital (see chapter eleven). These benefits resulted from a programme with relatively low monthly remuneration, with 99% of participating households remaining below the poverty line even while employed in the programme (McCord, 2004a), but which provided employment security and extended employment duration⁵⁶.

However, most MICs and almost all LICs adopt type A, C or D PWPs such as the EPWP in South Africa, MASAF in Malawi, the Ethiopian national PWP prior to 2005 (when the PSNP was introduced), AGETIP in Senegal, and programmes supported by the ILO’s EIIP in general. In this way PWPs offering a single limited episode of wage transfer comprise the majority of PWPs implemented in developing countries, despite the chronic rather than acute nature of the labour market problem many are attempting to address. Hence, most PWPs implemented in situations of chronic poverty do not offer the regular or ongoing support which would be required to meet the ILO income security objective, or the objective of preventive or promotive social protection, and fail to provide any sustained social protection benefits (either transfer or stabilisation) in the medium to long term. There

⁵⁶ Zibambele workers were employed on a part-time basis with contracts of one year, which are renewed annually subject to satisfactory performance of tasks. (McCord, 2003)

is no evidence of such programmes facilitating sufficient accumulation to ensure ongoing social protection benefits after the termination of PWP employment.

The second key component of income security within this debate relates to the question of the ‘adequacy’ of the wage, which is the key determinant of the transfer benefit of the programme. This issue is explored in detail below.

5.2 The Adequacy of the Wage

The impact of the wage will vary depending on its magnitude, as argued by Devereux:

‘Tiny transfers equal tiny impacts, but moderate transfers can have major impacts.’
(2002b: 672)

In order to attempt any assessment of the ‘adequacy’ of a PWP wage (an inherently subjective judgement⁵⁷) and its potential social protection function, it is necessary to calculate the real value of the wage. In order to achieve this first the net value of the wage must be ascertained, and then this must be reviewed in relation to the poverty gap experienced by participants. Only once this has been calculated can likely transfer and stabilisation impacts be assessed. In this respect, neither the transfer nor stabilisation benefits accruing from the wage paid to PWP participants are as simple to assess as is argued in much of the literature, where there is frequently an assumed equivalence between gross and net value of the PWP wage transfer which fails to take into account income forgone (see discussion in Van de Walle (1998) and chapter four above), and the contextual question of the net value of the wage in relation to the poverty gap is largely overlooked.

An exploration of the transfer benefit of a PWP is complicated by the need to assess the net rather than the gross value of the PWP wage, taking into account only the value of the *additional* funds coming into a household as a result of PWP participation, once income

⁵⁷ The ‘adequacy’ of a PWP wage is inherently subjective as there is no universal objectively measurable criterion against which the value of the wage may be measured. In instances where the wage is intended to purchase a defined basket of food and/or other commodities then its adequacy can be accurately assessed against this criterion, but such an objective is not frequently observed in the PWP discourse. The objective of the wage transfer tends to be less explicitly articulated, rendering an assessment of wage ‘adequacy’ problematic.

forgone by those participating in the PWP, and any secondary effects on household labour allocations have been accounted for. In order to appraise the likely social protection impact of the net transfer benefit, it is also important to examine the meaning of the net wage, in terms of its value in relation to household consumption needs and the poverty gap, taking into account non-PWP household revenue and other non-monetary forms of income (such as own agricultural production). Only when such an analysis has been carried out can an assessment be made of the likely social protection impact of a given wage in any given context.

Such an analysis of the real value of the PWP wage (in either absolute or relative terms) is rarely included in PWP design or evaluation, where the reductionist argument that ‘something is better than nothing’⁵⁸, is frequently cited to excuse the absence of empirical analysis to inform the setting of the wage in PWPs, or examination of the impact of the wage level on household consumption and intended social protection outcomes. The situation is further complicated if one attempts to assess the sustained social protection impact of the wage transfer in the context of PWPs which offer a single short episode of PWP employment (type A, C or D), as this necessitates attempting to analyse PWP wage impact beyond the period of programme implementation.

5.3 The Real Value of the PWP Wage

In order to ascertain the real value of the PWP wage there is a need to consider the opportunity cost of PWP employment in terms of i) total income forgone, ii) the value of non-monetary activities forgone, and iii) the expenditure (in cash or in kind) required to access PWP employment (rents), and then to calculate the net value of the wage taking these three factors into account. From this figure the real value of the net wage can be estimated in terms of its contribution to reducing the consumption gap experienced by participating households, as the value of the wage transfer is essentially a relative question: how does the value of the wage contribute to the reduction of the consumption gap?

⁵⁸ Such an assertion is widely cited in policy discussions regarding the process for the determination of the of PWP wages, but is not so candidly cited in the written literature.

The Opportunity Cost of PWP Participation

The question of income forgone by PWP workers has recently been addressed in some of the discussion around PWP (Van de Walle, 1998; Ravallion, 1998) but there are two other factors which need to be considered in terms of the opportunity cost of PWP participation if the real wage is to be assessed more accurately, both of which reduce the real value of the PWP wage and which receive little attention in the literature: i) the reduction of time spent engaging in own production subsistence agriculture and domestic activities, which may be experienced in terms of reduced current or future income or food supplies, or reduced investment in human capital, and ii) the costs incurred to access PWP employment opportunities. Each of these three issues is discussed below.

Income Forgone

Van de Walle argued in 1998 that the discrepancy between the gross and net value of a transfer through public works was given insufficient recognition in the evaluation of PWP as a form of social assistance (Van de Walle, 1998). Once income forgone is taken into account, the net value of a transfer through a PWP may be significantly less than its gross value, and the net transfer may not necessarily have the anticipated welfare impact of the gross transfer. The reality of income forgone by PWP employees is recognised by the World Bank:

‘Since poor people can rarely afford to be totally idle, they often give up some form of income to join a workfare scheme.’ (2001:156)

This assertion is supported by the findings which are consistent across a range of programmes, that mean income forgone by PWP employees represents a significant proportion of the value of the PWP wage transfer (Datt and Ravallion, 1994b). Studies have found a range of estimates of income forgone, for example, McCord found that 30% of participants in two programmes in South Africa had given up alternative paid employment to participate in the PWP, and that for these workers, the net value of the public works employment was between 30% and 50% of the gross transfer (McCord, 2004a:38-41). Similarly the World Bank estimates that forgone income could represent up to 50% of the wages paid by workfare schemes (World Bank, 2001:156), and Datt and Ravallion (1994b) report a wide range in income forgone among PWP participants, contingent on the

characteristics of the worker, the size of the programme, and demand for employment, with case study evidence from the EGS suggesting that income forgone may constitute 20% to 30% of gross earnings (Datt and Ravallion (1994b)). This literature implies that an understanding of income forgone is critical in assessing the potential social protection impact of a PWP intervention.⁵⁹

The Reduction of Own Production and Domestic Activities

It is important to problematise the *a priori* assumption that PWP participation has a negative impact in terms of the reduction of own production and domestic activities, given the limited availability of rigorous data, and the fact that PWPs are often implemented in contexts of chronic unemployment or seasonal underemployment, situations in which there is not necessarily a trade-off between competing demands for household labour. However, the limited number of cases where programme data are available indicate that the work requirement does lead to the widespread forgoing of alternative income-generating or subsistence activities (Datt and Ravallion, 1994b; McCord, 2004a), due to the desire to generate cash incomes and to optimise predictable household income in the short term, in the context of irregular and unpredictable employment opportunities outside the PWP. The extent to which this is problematic for livelihoods is contingent on the costs of moving in and out of own production.

⁵⁹ It could be argued that one implication inherent in this discussion of income forgone is that involuntary unemployment may be more limited than is officially reported in many of the contexts in which PWP are implemented. However, detailed analysis of survey data from the Zibambele and Gundo Lashu programmes in South Africa, discussed in chapters eight to eleven, suggests a more complex picture. While one third of the PWP workers reported income forgone, the kind of work forgone tended to be predominantly temporary, informal and survivalist in nature, consisting of forms of low quality employment which are not typically considered as 'employment' by programme participants (Adato, op cit), and would not therefore be recorded as employment in a labour force survey. In this context the realities of the labour market and PWP participants' location within it, combine with respondents own perceptions and definitions of 'employment', to result in a situation where high levels of involuntary unemployment coexist with a limited number of opportunities for survivalist and ad hoc employment. This should not be taken to imply that involuntary unemployment does not exist to a significant level in this or other PWP contexts where income forgone is reported.

For households without access to sufficient resources for current consumption, the work requirement may lead to the diversion of labour away from own production activities (agricultural or small-scale household production) into PWP employment in order to gain immediate cash income, reflecting the time preference for immediate income rather than deferred income resulting, for example, from agricultural production, or sale of own production. In the case of a diversion of labour out of agricultural production, there are potentially negative medium to long term livelihoods consequences, which are particularly problematic in situations where programme implementation coincides with periods of high agricultural activity, prompting a direct trade-off between the two activities offering short- and longer-term income/consumption benefits, which may have negative consequences in terms of medium to long term production, e.g. through loss of own production and seed for the next season. Equally, the work requirement may lead to the foregoing of alternative *ad hoc* or temporary income-generating or subsistence opportunities which occur during the period of PWP employment, see, for example, Datt and Ravallion (1994b) or McCord (2004a).

Survey evidence also indicates that where women are the main participants, PWP employment may lead to a reduction of time allocated to domestic activities such as child care (Chirwa *et al.*, 2004a; McCord, 2004b), which may either lead to the reallocation of domestic responsibilities within the household, subject to household labour availability, or the ability to purchase domestic support using PWP income (this has not been documented in the literature, as little research examines the secondary intra-household labour market impact of PWP employment; or result in certain domestic activities being forgone, leading, for example, to reduced child-care activities or food preparation (McCord, 1995; UK DFID, 2004b)⁶⁰. Anecdotal evidence from Malawi suggests that this reallocation of labour away from domestic tasks by PWP workers may result in reduced quality of ECD and child nutrition, and may pass an increased burden for child care onto older siblings, which may have future negative human capital costs. This is an area largely unexplored in the literature,

⁶⁰ Interestingly, the need to compensate for the reduction of household labour available for child care is explicitly recognised within the MEGS, where crèches are provided for the children of some PWP workers, with the crèche staff also being MEGS PWPs employees (McCord, 1995, MEGS Field Notes).

particularly with reference to sub-Saharan Africa where future research would be of great value.

Other Costs of Participation

The physical demands of participation in infrastructure PWP in particular may also lead to an additional opportunity cost of PWP participation, which is rarely acknowledged in the literature. These additional costs may be in the form of transaction costs to access employment, or additional costs in the form of increased calorific intake requirement, a cost which in many cases is borne physically by the worker. Transaction costs for PWP participation have only recently been systematically explored in the literature by Pellisery (2008) and Scandizzo *et al.* (2004). These can take the form of direct costs such as those incurred in travelling to work sites, etc., or a range of formal and informal rents extracted from those seeking to access PWP employment, ranging from bribes paid in order to procure documentation or secure PWP selection, to the provision of sexual favours in order to participate in the programme, in cases where employment is a highly valued and scarce commodity.

In addition to the set of costs related to accessing PWP employment, there are also physical costs borne by PWP participants, an issue which has not been given adequate attention in the PWP literature to date. The energy cost of PWP participation can take the form of individual calorific dis-saving, in terms of increased calorific requirement on the part of workers as a consequence of the work requirement, which is not compensated by increased food intake resulting from the PWP wage. If the increased requirement were satisfied, this would represent a further 'cost' of PWP participation, and contribute to a reduction in the net value of the PWP wage. Where the additional calorific requirement is not satisfied, as is frequently the case, the cost takes the form of a deterioration in nutritional status of the worker (human capital asset deterioration) should be offset against the net value of PWP participation. Such an approach would be methodologically complex, and it falls outside the scope of this study to attempt to quantify the value of this hidden cost, nevertheless, it is important to acknowledge the implications of this cost if real value of the PWP wage is to be considered. This problem has been documented in Bangladesh where, while PWP participation was found to have a beneficial impact on nutrition in participating households

overall, women PWP workers were found to exhibit significantly increased levels of malnutrition after participating in the programme than a control group not participating in the PWP over the same period (Helen Keller International, 2007). A similar impact was documented in EIIP programmes in Ethiopia in 2005, where ILO PWP daily task rate norms (cubic metres of soil to be excavated within a given period) had to be reduced in order to accommodate the weakened state of the workers, as the PWP wage level was not adequate to enable adequate consumption to offset the calorific demands of programme participation.⁶¹

5.4 Summary

It has been argued above that when considering the wage vector and its social protection impact, it is critical to attempt to calculate the net rather than the gross value of the wage, and that in order to do this the opportunity cost of PWP participation, the reduction of engagement in own production and domestic activities, and additional costs incurred need to be taken into account. This represents the inclusion of a broader set of costs and opportunity costs than are usually considered in the literature, and it is argued here that it is critical to extend the concept of the opportunity cost of PWP employment in order to determine the net value of the wage more accurately. This chapter does not, however, attempt to propose how this reconceptualisation could be operationalised in terms of how each component of cost could be monetised and calculated.

The preceding analysis suggests that the work requirement represents the introduction of a more significant opportunity cost than may have been recognised in the literature to date, particularly for labour-constrained poor households engaged in small-scale domestic production, with a range of domestic responsibilities.

5.5 The Meaning of the Real Wage

As suggested by the preceding analysis, the wage level has no inherent objective value to participants, but is only of value in relation to the needs it can satisfy. The social protection

⁶¹ Interview with Osei-Bonsu, ILO, Addis Ababa, 2005.

value of a wage is contingent on the extent to which the wage enables a reduction in the consumption gap experienced by those participating, once the additional costs and forgone income resulting from PWP participation, outlined above, have been taken into account. A small reduction in the consumption gap is likely to have more limited impact than a larger reduction, and before the extent of social protection benefits can be assessed, it is necessary to examine the magnitude of the reduction in the poverty gap.

The value of the wage is not just of academic interest. If set too low, PWP participation can directly result in increased malnutrition and associated morbidity, as discussed above. A low wage can also result in preventable fatalities among participating households; during the evaluation of a DFID-funded PWP in Malawi in 2004, it was found that deaths through malnutrition had been recorded in the households of PWP participants, during a period when an already low wage rate was further reduced through ‘forced savings’, an experimental programme initiative which reduced the effective wage rate in terms of resources available for immediate consumption, with the objective of promoting longer-term social protection benefits. Participants stated that had they received the full wage due, the deaths would have been prevented.⁶²

In response to challenges to the adoption of excessively low wage levels which are in tension with the social protection rationale of PWP implementation, the defence is often put forward that ‘something is better than nothing’.⁶³ However, this statement, which is frequently heard in the policy discourse, is problematic, and fails to recognise that the wage needs to be sufficient to offer transfer and stabilisation benefits, by promoting consumption, and possibly also accumulation, after the full costs of PWP participation to the participant have been taken into account, and that these benefits need to be significant to justify substantial programme delivery costs if the programme is to be economically viable as a form of social protection intervention.

⁶² PWP participant case studies prepared to inform PWP programme evaluation, CARE International, Malawi 2004.

⁶³ It is important to note that while this position is frequently articulated in verbal discourse by government agencies, donors, and implementing agencies, it is rarely committed to paper.

5.6 Setting the PWP Wage and Labour Market Concerns

It was argued above that the wage level is a critical determinant of the social protection impact of PWPs. However, setting PWP remuneration at the appropriate level in terms of its social protection impact, may be problematic from a labour market perspective. A review of PWP implementation internationally suggests that the wage level is typically set on the basis of three related considerations, none of which is informed by social protection considerations: i) a concern to prevent labour market distortion, ii) the desire to promote self-targeting of PWP employment through the principle of less eligibility, and iii) the reduction of demand for participation in order to limit rationing. On the basis of these concerns the PWP wage would conventionally be set below the 'prevailing wage' (itself a contested term (McCord, 2004b)), however, a PWP wage set on this basis may or may not be sufficient to promote social protection outcomes. The dominance of labour market and targeting concerns, over social protection considerations in the setting of the wage, has been a neglected issue in the PWP literature to date. The three concerns (distortion, targeting and rationing) and their implications for social protection are examined below, together with an exploration of the tension between the downward pressure on the wage rate resulting from these concerns, and the resultant reduced social protection impact.

Distortion

There is a significant concern, reiterated throughout the PWP literature, that PWP employment may draw workers out of alternative market-based employment, distorting the functioning of the labour market, and resulting in an increase in the cost of labour of those eligible for PWP employment by creating a 'wage floor', below which labour would prefer to participate in PWPs rather than seek employment in the open labour market. For these reasons it is argued that the wage should be limited in order to avoid labour market distortion, so that only the poor who do not have access to alternative employment at the market rate will choose to participate in the programme.⁶⁴ As summarised by Subbarao:

⁶⁴ In reality, PWP wages internationally have been variously set above and below the prevailing wage (see, for example, Subbarao (2001:7)) depending on the objectives of the programme, with varying degrees of

‘In order to promote self-selection, it is best for a public works program to offer a wage slightly below the market wage, that is, to maintain the level of the wage rate low enough so as to attract only the poor to work sites’ (2001:7).

Whether the feared labour market distortion, in the form of an elevated reservation wage, is interpreted as a positive or negative outcome of PWP implementation is to some extent contingent on ideological perspectives. It can be argued that if the labour market is highly segmented, with the lower segments being subject to exploitative rates of remuneration, such a distortion might not necessarily be seen as problematic. For example, in India the JRY and MEGS have pushed up the reserve wage for agricultural labour, reducing landowner profits and contributing to a reduction in local income inequality (Gaiha and Imai, 2005). However, such wage inflation is only likely to occur in the context of mass PWP implementation, with organised workers, and a highly segmented labour market, or where a PWP employs a significant number of workers in a particular geographical area. In Malawi 220,000 workers (approximately 4% of the labour force) participated in six major simultaneous and independently implemented PWPs, funded and implemented by a range of donors and INGOs, with varying levels of government participation (Chirwa *et al.*, 2004a). The wage rate was set autonomously within each programme, resulting in a daily wage which varied from MK36 (US\$0.34)⁶⁵ to MK192 (US\$1.79) for similar hours of employment (*ibid*:15). Adato *et al.* (1999) found similar levels of wage variation within contemporaneous PWPs in the Western Cape in South Africa, as discussed in chapter four. In these contexts wages were separately determined in each different programme, either by the implementing agents, or through a process of local wage negotiation. However, in neither instance was evidence of labour relocation found in response to these significant wage variations, nor evidence of workers moving out of alternative forms of regular market-based employment, nor local wage inflation in response to the PWP wage.⁶⁶ This implies that in certain contexts labour markets may be able to absorb a range of PWP wage rates without evidence of distortionary effects.

targeting success.

⁶⁵ US\$1=MK107 at 2004 prices.

⁶⁶ Adato *et al.* did however note that the wage differentials contributed to labour unrest in some instances.

It is likely that the critical contextual determinants of the impact of the PWP wage relate to the scale of the PWP labour 'demand' in relation to the supply of casual agricultural labour. In the Malawian context there is significant oversupply of casual agricultural wage labour, largely due to changes in agricultural production modalities and the traditional paternalistic relationship between labour and landowners in recent decades, and the bottom segment of the labour force has limited mobility, such that small-scale PWP implementation would offer alternative employment to only an extremely small percentage of those seeking casual labour, is unlikely to impact significantly on labour market prices (Chirwa *et al.*, 2004a). This is likely to hold true in most PWPs offering employment to a small percentage of the bottom segment of the labour force, particularly where PWP employment is highly rationed and geographical coverage is patchy. This would include almost all PWPs currently implemented in sub-Saharan Africa.

Self-Targeting through the Wage

One of the perceived benefits of PWPs is the potential efficiencies they offer by self-targeting, resulting from the provision of a low wage rate, to reach the poor, rather than using alternative targeting procedures which are often complex and costly to administer, as summarised by Subbarao:

‘... it is important to bear in mind the savings in administrative costs effected by self-selection.’ (2001:viii)

This self-targeting aspect of PWP is based on the premise that the work requirement and low wages, conventionally set at or below the prevailing wage, lead to an outcome in which the poor self-select into the programme, leading the World Bank to assert confidently (and without concern at the potentially negative social protection implications of the statement) that:

‘They [public works programmes] can easily be self-targeting by paying wages below market rates.’ (2001:155)

This assumption is prevalent in the PWP literature, see, for example, Subbarao *et al.*:

‘The best way to ensure that the program reaches the poor is to maintain the program wage at a level no higher than the ruling markets wage for unskilled labor’ (1997:77)⁶⁷

and

‘maintaining a low program wage ensures that participation rates are low, attracting only the poorest to work sites.’ (*ibid*:78)

Subbarao *et al.* continue their argument citing evidence from Kenya that when the wage is increased, non-poor inclusion errors also increase (Subbarao *et al.* (1997) citing Teklu (1994)). Similar arguments have been made on the basis of findings from the MEGS in India, where non-poor participation increased significantly after the upward revision of the public works wage (Ravallion, Datt and Chaudhuri, 1993).⁶⁸ Hence, it is assumed that by the adoption of a low wage rate, the poor will self-select into programmes, while the less poor will find them unattractive and not seek to participate.⁶⁹ According to PWP theory this then obviates the need for the administration of more complex poverty-targeting mechanisms, based on some form of community based selection or means testing, a principle fully discussed in Subbarao *et al.* (1997), which is at the heart of the PWP concept. Evidence of such successful targeting is presented in the literature, with Subbarao (2003) arguing that almost 100% of PWP participants in Chile, and 60-70% in India (taking into account both the JRY and MEGS) were ‘poor’ (cited in Vodopivec (2004:76)).⁷⁰ This supposed ease of targeting is therefore a major factor in the selection of PWP as a social protection instrument, since it reduces the

⁶⁷ It is important to note, however, that the PWP wage is not always set in relation to the minimum or prevailing wage. Subbarao found that out of ten programmes reviewed, only four paid wages less than the prevailing market wage, and four paid less than the minimum wage (there was some overlap between these two categories) (2003:7).

⁶⁸ Leakage to the non-poor increased significantly after the minimum wage which guided MEGS remuneration levels was increased above the ‘prevailing wage’ in the 1980s.

⁶⁹ The terms ‘poor’ and ‘less poor’ will not be further defined in this thesis. The purpose of this chapter is to explore participation in PWPs using a relational concept of poverty, based on the depth of poverty, since the majority of the population in many developing countries may be defined as poor, depending on what poverty line is adopted. In the light of this, it may be most useful to differentiate within the category of the poor rather than seek to define those who fall within or outside this category.

⁷⁰ The meaning of ‘poor’ in this context is not explicitly defined, and where a large proportion of the total population are poor, having the poor, rather than a sub-section thereof, representing a high percentage of participants may not be an adequate indicator of appropriately targeted resources; in this context an incidence indicator indicating the relative poverty of participants would be more informative.

need for the management of additional targeting processes. The implementation of alternative explicit targeting criteria would be costly in terms of both budget and skills, and is particularly problematic if the programme is to be implemented by the private sector; the social development skills required to ensure effective targeting within a community may typically be scarce among construction sector contractors, and there are no profit incentives for private contractors to expend resources on attempting to target their jobs to the poorest, rendering the 'self-targeting' nature of PWP a great benefit and an incentive for PWP selection over alternative instruments. It is assumed that in this context spontaneous poverty-related self-targeting will take place through the market, on the basis of the wage rate, resulting in low levels of leakage through both type one and type two errors (the inclusion of those who should have been excluded, and the exclusion of those who should have been included in the programme respectively).

5.7 Critique of Effective Targeting Assumptions

However, when Coady *et al.* (2002) compared a range of targeting approaches across 67 programmes, they found that while a PWP, the Argentinian Trabajar programme, had the best targeting outcome, three PWPs were among the ten worst performing programmes, and concluded that it was programme implementation, rather than the method of targeting *per se*, which was the key determinant of successful targeting. This is consistent with a number of studies that suggest a significant degree of leakage to the non-poor, even in the context of PWPs offering 'sub-market' wage rates, which challenges the assumption of spontaneous self-targeting by the poorest (McCord, 2004b; Barrett and Clay, 2003; Lembani and Mandala, 2006). Programme evaluations repeatedly indicate participation by those who may not be classed as among the poorest (those for whom the intervention was intended) is taking place, not only in terms of inclusion in the payment roster, but also in terms of physical participation. Devereux and Solomon cite evidence from the JRY in India suggesting that 57% of workers belonged to non-poor families, and that only 5% of workers belonged to the poorest categories ('very very poor' or 'destitute') (Devereux and Solomon, 2006:8, citing MRD (1994) and Chellia and Sudarshan (1999)). Similarly, Suryahadi *et al.* (1999) found that between 64% and 100% of the participants in the Padat Karya were non-poor. The theory of self-targeting should preclude this, providing the wage is sufficiently low, but Barrett and

Clay (2003) argue that this premise is conditional on a perfectly functioning labour market, which is frequently absent in the contexts where PWP are implemented. They suggest that the marginal value of labour varies considerably within and between households, contingent on the amount of labour available in the household, and access to productive assets such as land. This variation in the marginal value of labour renders PWP employment at a given wage potentially attractive as a form of supplementary income to surplus labour in less poor households, yet unattractive to poorer households with limited access to labour, *even with PWP wage levels at or below the prevailing wage*.⁷¹ When the imperfection of labour markets is taken into consideration, Barrett and Clay argue that economic theory confirms the empirical finding that self-targeting through a low wage may not be an adequate mechanism to target employment to the poorest. They argue moreover that a wage set at an extremely low level is contrary to the social protection objectives which were the initial rationale for programme implementation. This insight is echoed by Kaseke (2008), who argued that a ‘social protection intervention is not meaningful unless it provides a minimum level of protection’, i.e. there is a transfer level below which social protection transfer interventions cease to have a significant impact. This analysis is particularly relevant when a PWP wage is set at the prevailing wage level in a segmented labour market where the prevailing wage in the most poorly paid sector is extremely low, as in the *ganyu* (informal agricultural contract labour) system in Malawi, where the daily *ganyu* wage was approximately MK33/day (US\$0.31) in 2004 (Government of Malawi and the European Union, 2004). This wage is used to guide remuneration in the Social Action Fund PWP. Replicating this wage level in a PWP is problematic, since such a low wage seems unlikely to have a significant impact on chronic poverty and may create a tension between programme objectives and programme wage, within a programme with the objective of providing social assistance and addressing chronic poverty. This concern is rarely explored in the literature, and is examined in detail below, in an attempt to interrogate the social protection implications of a low PWP wage.

⁷¹ This theoretical analysis confirms empirical programme evaluation findings, such as the review of the DFID-funded Sustainable Livelihoods Through Inputs for Assets (SPLIFA) public works programme in Malawi, which found non-poor participants from labour-rich households self-selecting into the programme despite extremely low wage levels (DFID UK, 2004b).

Devereux and Solomon identify the same critical problem with using the wage to control PWP demand:

‘The problem with using the wage rate as a self-targeting mechanism is that employment programmes are often introduced in situations of mass chronic poverty, where the only way to ration the number of jobs offered is to reduce the wage rate to unethically low levels. In Burkina Faso in the early 1990s public works wages were set as low as one-third of the national minimum wage, in order to minimise ‘leakages’ to the non-poor (von Braun *et al.* 1991). Although this strategy was successful in terms of targeting the “poorest of the poor”, the income transferred was so low that there was no discernible impact on poverty reduction, and even the ‘safety net’ objective was compromised.’ (2006:6).

The assumptions underlying the self-targeting function of a low wage in PWP are currently subject to increasing criticism from a range of theoretical perspectives which take into account the imperfections of the labour market, and institutional barriers to programme participation. For example, Scandizzo *et al.* (2004) draw similar conclusions on the basis of institutional ‘process deficits’ and the theory of real options respectively, regarding the illusory nature of effective self-targeting in the context of imperfect labour markets with fluctuating wages, and high PWP entry and exit costs.

In this context Subbarao’s assertion that a wage rate no higher than the prevailing market wage is an ideal PWP design feature, is problematic, as is his response to his own question, ‘how low should the program wage be?’ (2003:14). Subbarao argues that the wage ‘should not be set at such a low level that it stigmatises the work, thus leading the “poor but proud” to go hungry’ (*ibid*:10), but fails to explore the fact that the social protection impact of PWPs is a function of the value of the wage.⁷²

Drawing on African experiences, Barrett and Clay present a fundamental challenge to this accepted, but problematic argument, and conclude that higher wages, together with alternative targeting mechanisms would be a more appropriate response when social protection outcomes are the primary PWP objective, since low wages in PWPs are neither

⁷² While Subbarao recognises that ‘a low wage rate will also result in low transfer earnings to each (poor) participant’ (Subbarao, 2003:4), he does not explore the consequences of this statement in terms of the efficacy of public works as a form of social assistance.

sufficient to ensure adequate poverty targeting, nor are they consistent with programme objectives relating to the sustained reduction of poverty. Similar conclusions were drawn by Mujeri with reference to PWPs in Bangladesh, who argued for more restrictive active targeting criteria, including means testing, rather than self-targeting through the wage (Mujeri, 2002:33, cited in Devereux and Solomon (2006:7)) and also by Chirwa *et al.* (2004a) with reference to the level of the MASAF PWP wage in Malawi:

‘... there is evidence that PWP employment is attractive to the less poor as a form of secondary income for households which are not labour constrained (CARE, 2003 and 2004). This underscores the fact that wage alone is not a sufficient mechanism to ensure the participation of the poorest, and that explicit poverty targeting is required to ensure that intended members of the community can access employment, in line with programme objectives.’ (2004a:27).

5.8 Rationing

As well as promoting targeting, the low wage is also presented in the literature as a way of controlling demand for PWP employment and ensuring that inclusion errors are avoided, see Subbarao:

‘A relatively high wage rate is most likely to result in job rationing.’ (1997:6)

The basis of the argument is that a lower wage will reduce demand for PWP employment, therefore reducing rationing of access to the programme, while at the same time, lower expenditure on wage per participant will enable greater coverage. However, this argument may be contested on two related grounds. The first is that the assumption that there is a simple linear relationship between PWP wage and demand for employment is not necessarily robust in imperfectly functioning and highly segmented labour markets with mass unemployment, as conceded by Vaidya and Ahmed (2007) in their attempt to model the impact of the wage level on PWP employment demand in South Africa. The second is that given the small scale of most PWPs, almost all entail rationing despite the adoption of low wages, with the effect of the capped wage being limited to reducing the extent of excess demand for PWP employment at best. These interlinked issues are explored below.

The attempt to reduce demand through the ‘less eligibility’ condition, using capped PWP wages is challenged by the argument that there may not be a simple linear relationship

between PWP wage and demand for PWP employment. This linearity is assumed in reductionist analyses of likely PWP demand which attempt to isolate the level at which a PWP wage should be set in order to limit potential PWP employment demand, and reduce it to a level at which a government feels able to deliver employment. Such analysis fails to take into account the imperfect functioning of labour markets in the context of mass poverty and unemployment, as argued by Barrett and Clay (2003), and the resultant failure of the labour market to signal clear reserve prices below which PWP employment ceases to be attractive. Evidence from Malawi explored in detail below (Chirwa *et al.*, 2004a) indicates that even at below subsistence levels of remuneration, access to immediate cash income leads to demand for PWP employment among certain segments of the labour force in situations of extreme poverty. Barrett and Clay's analysis would suggest that employment at such rates may also be attractive to surplus labour with a low marginal value in less poor households, and in many instances anecdotal evidence suggests that the poor are not well placed to compete against less poor segments of the unemployment for PWP work opportunities.

In situations of chronic poverty and mass unemployment/underemployment where the scale of PWP employment offered is trivial in relation to the scale of the unemployment and poverty problem, it is likely that competition for PWP employment among both the poor and less poor will erode any putative poverty-based self-targeting, in the absence of explicit poverty-targeting activities. In South Africa, for example, where the national public works programme aims to offer only 200,000 employment opportunities per annum in a context where there are more than four million unemployed, targeting problems are likely to occur, with the poorest not necessarily being best placed to access the extremely limited number of jobs available (McCord, 2003).

Given that demand for PWP employment tends to exceed the supply of employment opportunities, and the pervasive leakage of employment opportunities to the non-poor inherent within a segmented labour market, even when wages are set low, Barrett and Clay's (2003) argument for the adoption of an increased wage rate together with the use of explicit

targeting mechanisms is strong, and offers an important alternative to the conventional PWP theoretical canon.⁷³

In addition to the limited targeting efficacy of a capped PWP wage, it is critical to consider that the consequence of utilising the less eligibility principle may be a wage can provide only marginal social protection benefits, once the costs of participation have been taken into account. It is questionable whether such a wage level is desirable and compatible with a programme nominally implemented to achieve social protection outcomes.

5.9 Malawi Social Action Fund (MASAF) PWP Case Study

The questions outlined above are explored below in relation to the World Bank and DFID-funded Malawi Social Action Fund (MASAF) PWP, which is typical of type A donor-supported PWPs in sub-Saharan Africa⁷⁴. The programme is examined in order to shed light on the key issues outlined above which are at the heart of the question of setting the PWP wage, and the function of the wage in relation to social protection objectives. The case study explores how the wage level is determined and what the social protection implications of a PWP wage resulting from this determination process are likely to be. The case study illustrates that the process of wage setting in a PWP can be subject to both ideological contradictions and empirical difficulties, and that how these dilemmas are resolved may have significant implications for the social protection outcome of the programme.

MASAF has been implementing public works since 1995 and is the largest PWP employer in Malawi, with the aim of providing income and employment opportunities that contribute to longer-term economic growth (UK DFID, 2002). In line with the Malawi Poverty Reduction

⁷³ One example of such practice is the Zibambele programme in South Africa, which has adopted a higher wage rate than most PWP in South Africa (set at the minimum wage) and includes explicit poverty targeting using community selection methods, in which 99% of the workers' households fall below the poverty line.

⁷⁴ This exploration of the PWP wage draws on an analysis conducted into the MASAF PWP in May 2004 as part of the 'Study to Inform the Selection of an Appropriate Wage Rate for Public Works Programmes in Malawi', prepared for the National Safety Nets Unit of the Government of Malawi, by Chirwa, McCord, Mvula and Pinder (2004). The study was initiated in response to concerns expressed by a wide range of stakeholders, including workers, local government officials and donors, that the daily wage rate paid to PWP employees working for MASAF was excessively low.

Strategy and the Malawi National Safety Net Programme of which it forms a part, MASAF's objective is 'improved livelihoods of vulnerable and marginalised groups in Malawi society by enhancing their productivity and thereby increasing their self-reliance' (Malawi, Ministry of Economic Planning and Development, 2003), placing the programme explicitly within the social protection objective set. In terms of the social protection hierarchy outlined in chapter three, the programme objectives conform to those of 'transformative social protection', with their explicit aim of promoting sustained benefits to participants. To this end the MASAF programme developed a type A PWP, offering a single short term episode of PWP employment to participants. This represents an inconsistency between the primary objective of the programme and the programme type selected, a tension between programme form and function which is present in many donor supported PWP in sub-Saharan Africa as discussed above, and which is exacerbated by the stringent wage capping policy adopted, which is explored below.

PWP and the Prevailing Wage: Problematisation of Wage Setting Conventions

Conventional PWP theory is based on the premise that in order for the PWP wage to function as a mechanism for self-targeting by the poor, the wage must be set no higher than the 'prevailing market wage'. In this way it is assumed that the poor will select themselves into the programme, while those with alternative employment at or above the prevailing market wage will have no incentive to leave their work to participate in the PWP. Correctly identifying the prevailing wage is key in order to address the concerns relating to distortion, targeting and rationing objectives which underlie this approach. However, analysis of the Malawi situation indicates that identifying the prevailing wage in a segmented labour market may itself be problematic.

The wage for the programme was set in 2002 at MK30 (US\$0.28 at 2004 prices), broadly in line with the prevailing wage for casual agricultural labour (*ganyu*), and was increased to MK36 (US\$0.33) in 2004 in response to the widespread criticism of the PWP wage, pending the outcome of a study to calculate an economically and socially justifiable revision of the

rate (an increase of 20% compared with 47% rural inflation over the period 2002-2004).⁷⁵ A re-analysis of the 'prevailing' wage in rural Malawi by Chirwa *et al.* (2004a) revealed a critical insight; in any given context there may be no single prevailing wage, due to a segmented and imperfectly functioning labour market. Zgovu (2000) recognised this problem (although not exploring it from the perspective of its implications for PWP) and argued that it may be more useful in analytical terms to identify two sets of prevailing agricultural sector wages; one wage for highly casualised and sporadic agricultural labour, known in Malawi as *ganyu*⁷⁶, and one for 'agricultural monthly wage' employment, which he identified as a less exploitative form of agricultural employment. This immediately presents a dilemma in terms of the attempt to identify a 'prevailing' rural wage to inform the PWP wage in order to avoid labour market distortion, promote targeting, and induce rationing; the three benefits customarily associated with adopting the prevailing wage for PWP.

The PWP wage of MK36 compares to a daily *ganyu* wage estimated to be between MK20 (in-kind payment) and MK50 to MK70 in cash (US\$0.19 and US\$0.46-0.65) and an 'agricultural monthly wage' wage of MK2,400 (Chirwa *et al.* (2004a) based on Zgovu (2000) and CARE (2004) at 2004 prices).⁷⁷ The market wage for construction employment similar to that provided by MASAF was between MK1,500 and MK2,000 per month (US\$14.02 and US\$18.69), with the rural construction industry norm being MK1,600 (US\$14.95).⁷⁸ While the wage data summarised above are problematic, and the various wage levels may not be directly comparable, the figures converge at between MK1,500 and MK2,400 (US\$14.02 and

⁷⁵ The daily rate is actually the rate for the completion of one task, as payment was on a task based rate, with one task being set per day, on the assumption that it would take a total of 4-5 hours of work time to complete, in conformity with ILO norms for task based PWP remuneration.

⁷⁶ *Ganyu* is occasional and temporary task based work, typically limited to one to three days' duration, sought by the poorest in agricultural areas, and often remunerated in-kind through agricultural produce or a plateful of ground maize meal. It is widely considered in Malawi to be exploitative and over recent years as poverty has deepened in the country and the agricultural sector has experienced significant restructuring, the number of workers offering *ganyu* labour has increased and the number of employers seeking it has decreased, leading to a fall in *ganyu* wage rates in real terms. Since several days of work-seeking activity may be required for the attainment of one or two days of *ganyu* employment (see CARE (2003) and CARE (2004)), it could be argued that the real wage rate is lower than these figures indicate.

⁷⁷ It is important to note that this is an indicative figure only, since it is not known whether 'monthly wage' rural employment has kept pace with inflation. The data available suggests that for other kinds of rural employment the wage has not kept pace with inflation.

⁷⁸ National Construction Industry Council of Malawi, quoted in Chirwa and Mvula (2004).

US\$22.43), which is considerably higher than the monthly wage of MK792 (US\$7.40) offered in the MASAF programme.

If *ganyu* employment is considered a last resort for the very poorest who otherwise face destitution, then a PWP wage which exceeds the *ganyu* wage level should not be problematic, as an alternative to those in this sector where excess labour supply is forcing the wage downward. Drawing work seekers out of this sector would be of benefit to participants at the bottom end of the labour market, rather than a negative distortion. Research indicates that supply of *ganyu* labour exceeds demand significantly⁷⁹, and hence paying a wage above the *ganyu* wage rate is extremely unlikely to have any significant distortionary effect on the *ganyu* labour market, or make any impact on the international competitiveness of Malawian labour; an argument advanced by the World Bank against an upwards revision of the PWP wage rate.⁸⁰

The second critical insight from the Malawi case study is the fact that replicating an exploitative prevailing wage in PWP employment could itself be highly problematic given that the PWP has explicit poverty reduction and livelihoods objectives. In the light of this, the ability of the PWP wage to contribute to these objectives should be central to the setting of PWP remuneration rates, as the critical question is whether the wage is sufficient to have a social protection impact in line with the programme's objectives. When the objective of a programme is transformative social protection, the provision of a low wage, as in the MASAF PWP, may have serious social protection trade-offs (Devereux, 2000). Clearly this represents a dilemma, which may require a rethinking of PWP wage setting orthodoxy, both in terms of the theory, and also in programme design, where the maxim of setting a wage at or below the prevailing norm tends to dominate social protection considerations.

⁷⁹ Qualitative research conducted by CARE into the rural labour market in Malawi indicated the desperation of those located within the *ganyu* seeking segment of the labour force, including reports of labourers leaving sick children untended and travelling three days walk from home to take up work offering a total remuneration of only three maize cobs.

⁸⁰ World Bank Country Economist in Malawi, 2004, pers. comm.

The Wage and the Social Protection Objectives of Public Works

Given the MASAF objective of improving the livelihoods of the most vulnerable and marginalised in the country, it is critical to examine the role of the restricted PWP wage in relation to this objective and its impact on the likelihood of realisation.

The primary question is whether PWP income plays a role in promoting livelihoods. As argued above, it is assumed that this is contingent on whether the wage is sufficient at least to ensure that basic subsistence needs are met, following Devereux (2000) who argued that the poor use incremental income first to satisfy basic consumption needs, then to invest in human capital (education and health) and social capital, and only thereafter to invest in income-generating activities. The PWP wage only impacts on productive investment if it is large enough to ensure that consumption needs are met.

Consumption Gap

In order to assess the adequacy of the PWP wage in terms of addressing the programme's social protection objectives, it is necessary to examine the value of the wage in relation to the consumption gap of participating households in order to explore the meaning of the wage transfer to participating households. Chirwa *et al.* (2004a) attempted to calculate the consumption gap for participating households, and while the analysis is an approximation given the data constraints, it offers an insight, however imperfect, into the meaning of the transfer in terms of the household economy.

In order to calculate the monetary value of the basic consumption needs of participating households, the total monthly income required to provide subsistence for a household comprising 5.6 members, the average household size for the ultra poor who form the target group for this programme, was estimated.⁸¹ Three alternative subsistence-based poverty lines were derived, the first using the official Malawi poverty line based on the Integrated Household Survey, the second based on a costed 'Subsistence Basket', and the third based

⁸¹ This calculation takes into account only the total number of household members, on the basis of the 1998 Integrated Household Survey, the most recent data available at the time of the study, rather than adult equivalents.

on ‘perceived needs’ identified and costed by PWP employees themselves (CARE, 2003).⁸² The three resulting monthly household poverty lines were MK4,099, MK2,917 and MK2,215 (US\$38, \$27 and \$21 respectively) for food subsistence, and MK5,465, MK3,501, and MK2,745 when basic non-food costs were also included (US\$51, \$33 and \$26).⁸³

Other Income and Own Production

In order to use the poverty lines outlined above to assess the contribution of the PWP wage to reducing the consumption gap, other sources of household income, both own production and income for cash or goods in-kind, were taken into account.

Recent survey work among PWP participants suggests that total monthly household income among households participating in the programme were in the range of MK200 to MK400 for women workers (US\$1.87 to US\$3.74), and MK400 to MK700 for males (US\$3.74 to US\$6.54) (CARE, 2004).⁸⁴ The non-PWP income reported by the labour-constrained households, the poorest group within the MASAF PWP participants, was minimal. Given the low levels of returns to economic activity by this sub-group, which represents the target group for the programme in terms of its safety net function, it is argued that the value of non-PWP income may be considered insignificant and so may be set aside in terms of calculating the impact of the PWP wage. If successfully implemented, participation in PWPs should enable the shifting of income-generating work from low to higher return activities,

⁸² The first poverty line used the 1998 Integrated Household Survey (IHS) inflated to 2004 prices, which is based on the purchase price of 2,100 calories per person per day. The 1998 IHS poverty line has been updated using the official rural consumer price index for 1999 to 2003 and a cost of living index for 2003/4. The ‘Subsistence Basket’ poverty line was based on the purchase of a basket of basic rations required to meet a minimum calorie requirement in line with World Food Programme recommendations costed at 2004 prices, and the ‘Perceived Needs’ poverty line was derived from the cost of purchasing a basket of goods required to meet basic consumption needs, identified and costed by current PWP employees themselves (CARE, 2003).

⁸³ It is interesting to note that the IHS poverty line is significantly higher than both the Subsistence Basket and Perceived Needs poverty lines. This discrepancy suggests that there may be a problem with either the IHS data or the CPI, given the simple derivation of the Subsistence Basket Line.

⁸⁴ This suggests that female participants may be from poorer households than male participants, with more limited labour market options and extremely low returns to the activities in which they participate to complement their PWP income.

and should increase the level of non-PWP contributions to total household income, in this way contributing to improved livelihoods.⁸⁵

The second factor which must be reviewed when considering total household income is own production, which for most households will make a significant contribution to household subsistence requirements.⁸⁶ The most recent Community Household Survey available at the time of the study (CHS, 2004) suggested that for the year 2004/5 own production would represent 3.5 months of household food consumption, on average.⁸⁷ Many poor households currently lack sufficient labour, land or capital to ensure even these modest levels of own production, and so 3.5 may be taken as an upper limit of the period of own production consumption among the poorest.⁸⁸ On the basis of these own production assumptions, the minimum daily PWP wage required to ensure sufficient cash income to supplement own production and meet basic household subsistence needs may be calculated.⁸⁹ Daily wage rates which assume PWP employment for 12 months in a year are set out in Table 5.1 below (if the period of employment were less than 12 months, the wage would need to be increased proportionally to cover the annual consumption gap).

⁸⁵ This was illustrated in a recent PWP in Malawi offering a wage rate significantly above subsistence level, in which part of the income was used to purchase basic capital goods which enabled workers to move away from the gathering and sale of primary materials (e.g. wood) to higher return production or commerce based economic activities (Pinder, 2001).

⁸⁶ 90% of the poor have access to land, although many lack sufficient labour or capital to use all the land owned for agricultural production (Chirwa and Mvula, 2004).

⁸⁷ This is similar to the level projected for 2003 (FEWS, February 2003).

⁸⁸ The PWP wage could potentially contribute to the hire of labour (ganyu), purchase of inputs, and/or land rental where land access is currently insufficient, rendering participating households more likely to increase own production in subsequent years.

⁸⁹ It should be noted that the recommended daily wage rate would vary according to the period of employment offered within the PWP. The duration of employment has been found to be critical in terms of the livelihoods impact of a public works programme (see, for example, Dev (1995); Devereux (2000)).

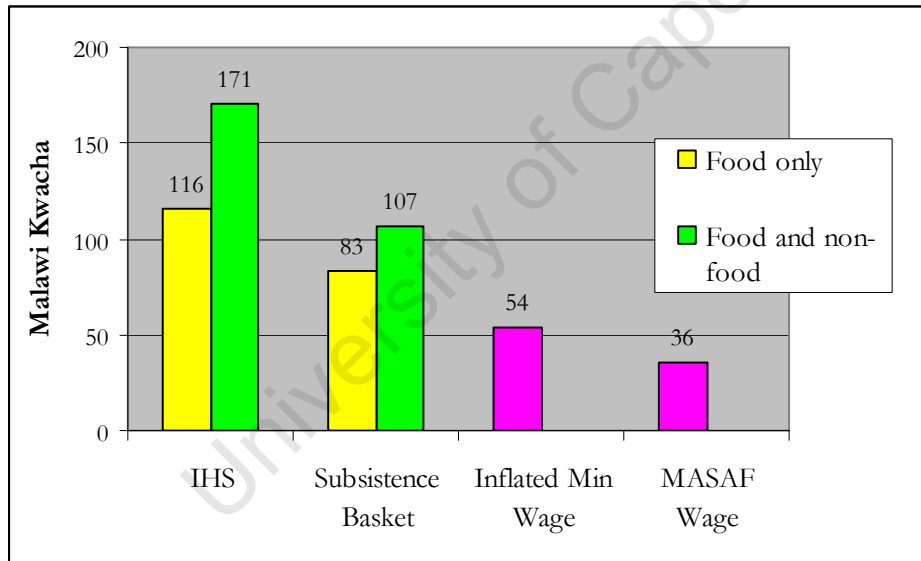
Table 5.1: Daily PWP Wage Required to Meet Household Subsistence* (Malawi Kwacha)

	Poverty Line (MK)		
	IHS	Subsistence Basket	Perceived Needs
Food only	116	83	60
Food & non-food	171	107	85

Source: Chirwa *et al.* (2004a:23)

*Assuming PWP employment is provided 12 months per annum

These figures are set out alongside the current and inflation-linked MASAF wage rate in Figure 5.1 below.

Figure 5.1: Daily PWP Wage Required to Meet Household Consumption Needs on the Basis of IHS and Subsistence Basket Derived Poverty Lines

Source: Chirwa *et al.* (2004a:23).

From Figure 5.1 it is clear that the MASAF wage is significantly below the monthly income required to meet even basic household subsistence needs according to official and derived poverty lines. The PWP wage represents only 30% and 40% of the income required to meet basic household food needs according to these two poverty lines respectively, and 20% and 30% of food and non-food subsistence needs. If increased in line with rural inflation, the minimum wage of MK54 would represent only 50% of the income required to meet basic

food needs in terms of the IHS, indicating that it is set at an inadequate level to have a significant impact on poverty, even if inflation-linked.

The Impact of a Low Wage on Programme Objectives

With the wage of MK36 (US\$0.34) PWP employment would reduce the depth of poverty experienced by participating households. However, the wage is significantly below that required to ensure that the poverty reduction objectives of the programme are met, and is unlikely to contribute significantly to the objective of livelihoods promotion or the transformative social protection outcomes anticipated in the programme rationale. This is confirmed by the findings of the 2003 beneficiary assessment which shows that the majority of PWP income is spent on food and basic provisioning, with only 6% of participants investing in livelihoods promotion, for example, purchasing farm inputs or livestock (MASAF, 2003). The main reason given by participants for this lack of investment was the low wage level. Hence, with the existing wage level, it is unlikely that the social protection goals of the MASAF PWP would be met, or that the programme would have a significant or sustained impact on poverty.

5.10 Conclusion

If sustained social protection benefits are to be achieved through a PWP, the wage needs to be sufficient to ensure that, at a minimum, basic household subsistence needs are met, as only then is accumulation of assets possible. Failing this, the wage transfer needs to be sustained throughout the period of vulnerability and need.

The level of the PWP wage needs to be consistent with the livelihoods and poverty reduction objectives of the interventions, and take into account the nature of the labour market crisis whose worst consequences it is seeking to mitigate. The MASAF programme is typical of programmes internationally inasmuch as the restrictions placed on the wage rate in order to address concerns about disrupting the labour market render the programme highly unlikely to have any significant impact on social protection objectives, which is the core rationale for programme implementation; yet this paradox is not explicitly recognised by donors or implementing agencies, who insist on setting the wage on the basis of labour market, rather than social protection considerations. PWPs are frequently implemented in

line with the injunction that the wage should be set at or below the prevailing wage, no matter how low this may be relative to subsistence needs. This chapter argues that the question of wage setting should take into account the fundamental social protection objectives underlying the implementation of a PWP intervention, and the fact that setting a wage too low may undermine a programme's social protection impact, as well as in some instances potentially discouraging the participation of the poorest, for whose benefit the intervention was initially designed.

While a low wage is intended to prevent labour market distortion, reduce demand and target the poorest, this chapter argues that the available evidence calls into question the effectiveness of wage limitations in achieving any of these objectives, and asserts moreover that the adoption of this approach may, in many cases, be to the detriment of those participating in PWPs. Moreover, the net value of the PWP wage may be significantly overstated in the current literature. Once the full range of costs implied by the work conditionality are taken into account, the net value of the PWP wage may be significantly lower than its gross value, and its real value in terms of its social protection impact, may be correspondingly lower than is generally assumed. The result may be the implementation of programmes which may suffer internal tensions such that the ultimate net value of the transfer received by participants may be insufficient to result in significant social protection benefits, a problem which is particularly acute in the case of type A, C or D PWPs implemented in contexts of chronic poverty and unemployment. This chapter concludes by suggesting that it cannot be assumed *a priori* that the PWP wage offers an effective vector through which social protection benefits will accrue to participants.

6 THE THREE VECTORS: ASSETS

In the preceding chapter, it was argued that the wage benefits of PWP participation are almost exclusively limited to the duration of the programme and are unlikely to confer long-term benefits themselves, and that in some instances the wage is set too low to deliver significant social protection benefits, even during the period of programme implementation. Given these insights, the ability of PWPs to provide sustained social protection benefits in the context of chronic poverty is in part contingent on the ability of the second vector, assets created, to deliver significant medium to long term benefits. Within the PWP discourse it is anticipated that the creation of assets will confer social protection benefits to PWP participants, or communities more generally, through the promotion of livelihoods in various direct and indirect ways. In this chapter, the lack of critical thinking around the issue of the impact of assets on social protection outcomes in PWPs is highlighted, and then key questions which have been neglected in the conventional PWP literature are explored, relating to the role of asset provision in different types of PWPs, a critical analysis of the value of assets created, the question of incidence, in terms of identifying the key beneficiaries of the assets created, the cost of asset creation through PWPs, and the premium associated with the use of PWP to create infrastructure. Finally, the chapter examines the key determinants of the quality of assets produced through a PWP, and the implications for the social protection outcome.

Assets are created in all PWPs as the product of the work requirement and can take many forms, the most typical being the creation of physical infrastructure, primarily roads, but also, in a small number of recent programmes extending the concept to the provision of what may be described as ‘social infrastructure’, in the form of social service provision, such as Home Based Care (HBC) for those affected by HIV/AIDS, or the provision of Early Childhood Care and Development (ECCD) services (McCord, 2005). The creation of assets is generally included as a key rationale for the selection of PWPs over alternative social protection assistance measures, as PWPs avoid the perceived trade-off between ‘productive’ investment in infrastructure, and ‘consumption’ expenditure on welfare by combining social

assistance and productive asset creation in one intervention. As Smith argues with reference to Malawi:

‘... as far as possible, safety nets in Malawi need to be productivity-enhancing (for example in the form of public works [...]), rather than pure transfers [...] to maximize long-term income growth among the poor.’ (2001:13)

However, the beneficial economic and developmental value of the assets created through PWP is frequently assumed rather than empirically established. In some instances, such as the flood- and drought-related assets created in Bangladesh and India which have a direct impact on mitigating future risk and promoting land productivity, the economic benefit of the infrastructure created is often readily apparent, in terms of a reduction in flooding and improved water harvesting opportunities. Where the assets created are intended to promote livelihoods and economic growth, however, rather than mitigate known environmental threats, the value of those assets may be less easily quantifiable and their impact on the livelihoods of PWP participants is frequently unobserved. Under these conditions asset impact evaluation is critical, yet such evaluation is rarely carried out, as there is an assumption among policy makers that the production of assets is *de facto* synonymous with growth and poverty reduction, without any consideration of the nature or value of the assets created, or the distribution of asset benefits across the population. This results in an often implicit analytical conflation of the provision of assets with the achievement of poverty reduction, livelihoods promotion and social protection outcomes, or even more problematically, a conflation of *spending* on asset creation and social protection outcomes⁹⁰. An example of the conflation of PWP asset construction with poverty alleviation is to be found in the document produced by the South African government to celebrate ten years of democratic rule, which justifies the claim of poverty alleviation by stating the number of

⁹⁰ A similar debate is currently underway in South Africa with regard to the provision of the ‘social wage’ (goods and services) for the poor, where the cost of provision has been equated with the value of the benefit experienced by the poor in some of the literature (PCAS, 2003) following the benefit incidence or cost apportionment method of estimating incidence of benefits (see for example, Demery (2000)), which is challenged elsewhere in the social protection discourse (Meth, 2008a).

assets constructed under the national PWP, and the funds spent on their construction, rather than assessing the impact of those assets on poverty:

‘... these [public works] programmes have been successful in alleviating the asset poverty of communities. Over R6.5 billion of expenditure on infrastructure has provided 2,182 community assets.’(South Africa, PCAS, 2003:19)

Such conceptual looseness in evaluating the asset impact of PWPs is typical within the literature, and is a major source of weakness in the current PWP discourse.

6.1 Type of PWP and Asset Creation

Given the inherently limited benefits accruing from the wage transfer alone, the asset vector is critical in the context of type A and C and D PWPs, if anything other than temporary (protective) social protection is to be achieved. It is important to note at this juncture that both the type of PWP implemented and the relative prioritisation of the objective sets associated with the programme, may affect the quality of the asset created, as well as the likelihood of it impacting significantly on social protection outcomes. Devereux and Solomon have argued that the creation of quality assets within PWPs is now central to all PWPs, and that the value of the assets created in PWPs is as important as the work created (Devereux and Solomon, 2006), but this assertion is challenged by evidence from several programmes in sub-Saharan Africa currently in operation such as the MASAF PWP in Malawi (UK DFID, 2003), the EPWP in South Africa (McCord, 2006a), and the PSNP in Ethiopia (McCord, 2005), where objectives relating to the provision of quality assets have been compromised by the requirement to furnish adequate numbers of employment opportunities. This is a further example of the confusion wrought by lack of adequate differentiation of PWP types and the adoption of multiple objective sets simultaneously without ensuring adequate conceptual coherence.

Before exploring these issues in more detail, it is useful to give a brief overview of the relatively new phenomenon of the provision of social, rather than physical infrastructure as the object of the PWP work conditionality. Given that the priority needs at community level in much of sub-Saharan Africa may currently be related to social service provision in support of households caring for those with AIDS, it is appropriate to look at the question of PWP

asset provision through a different lens, in terms of support to the social infrastructure rather than the provision of additional physical assets. PWP employment to support the extension of social service provision, in the form of ECD and HBC, has been developed explicitly within the South African EPWP in the last five years (EPWP, 2004a), and similar initiatives have been identified in Malawi and Zimbabwe (McCord, 2005), while the MEGS also includes a social care component, although this is limited to activities directly relating to physical infrastructure programmes, such as the provision of day-care for the children of PWP workers. These programmes operate at the interface of government employment schemes and non-governmental service provision programmes, with the South African EPWP being the most developed example of social infrastructure provision *qua* PWP.

There is considerable potential for expansion in terms of unmet demand for service provision through type B GEP programmes, and opportunities exist to absorb significant numbers of workers in the medium to long term in pursuit of the public good, for example, through support to the roll-out of TB and ARV treatment programmes, and the provision of improved HBC and ECD throughout the continent. However, there are quality concerns associated with the expansion of service delivery through PWPs, particularly in relation to potential compromises in service quality resulting from a significant and often rapid expansion of employment in the context of a type B (government employment) programme, in the absence of adequate training, management or supervisory capacity⁹¹. There is little impact evidence in the PWP literature relating to social infrastructure programmes, and monitoring of service quality, levels of take-up or user satisfaction tends to be weak or non-existent; as a result, assessing the quality and impact of service provision is as problematic as assessing the quality and impact of physical infrastructure provision.

⁹¹ This issue was raised vociferously by representatives of the NGO Social Sector in South Africa, responsible for the implementation and extension of the social component of the EPWP, with particular reference to ECD and HCBC at the Second International Conference for Employment in Development, hosted by the Work Research Centre of the University of the Witwatersrand in September 2005.

The Importance of Asset Production in Different Types of PWP

In attempting to introduce greater conceptual rigour into the debate relating to the function and value of PWP assets, it is critical to establish that asset creation can potentially have two fundamentally different roles within a PWP. Either asset creation can be the primary purpose of programme implementation, with labour market and indirect social protection impacts representing positive externalities, as in type C PWPs, or asset creation can be primarily a means of absorbing labour and satisfying the work requirement, with the assets created being a positive externality rather than the primary rationale for programme implementation, as with type A and B programmes, in which labour market or direct social protection objective sets dominate.

In this way, PWPs tend to adopt either asset supply or labour market/social protection outcomes as their primary objectives, with labour market benefits and asset supply being considered the respective positive externalities, implying a significant difference in programme balance in the two cases, which, as will be discussed, may have significant implications in terms of the resulting social protection outcomes. In type A and B PWPs, the objective of employment provision dominates the objective of asset creation, whereas in type C PWP, the provision of infrastructure is the primary objective, to which employment creation and any social protect objectives are subordinate.

This results in differences between the different PWP types in terms of how any social protection benefit is likely to be conferred. In type A and B programmes, it is primarily labour absorption considerations, rather than concerns with livelihoods promotion or economic growth, which lead to the selection of a particular asset for PWP construction. Subbarao and Smith noted this problem with PWPs in Ethiopia, observing that:

‘Workfare programs are not integrated with activities at various levels of government [...] because there has been no integration of aid-funded projects with the broader developmental activity [...] the program suffered from [...] low productivity (did not lead to assets of the type found in India’s Maharashtra employment Guarantee Scheme). The program is driven by the consideration of labor use [...] rather than the creation of assets consistent with regional (community) needs and priorities [...]. As a result [the] aim to use food aid as a ‘dual purpose instrument of relief and development’ did not materialize.’ (2003:21-22).

This problem is particularly acute in the case of type B PWPs which require a large number of employment opportunities for an extended period. Only where sufficiently large numbers of labour-absorbing projects have been identified, designed and pre-approved and are maintained ‘on the shelf’ at local level for implementation at the time of demand for PWP employment has the provision of sufficient employment to meet demand been largely, although not universally, achieved. Examples of this approach are the MEGS programme in India, and the New Deal programmes in the US. However, many type B programmes (and also type A), have not succeeded in creating sufficient numbers of adequately selected and designed employment opportunities in this way, and a more frequent scenario is that the quality of assets or services created through PWPs has been undermined by the need to identify and execute significant numbers of employment opportunities in a limited time period. In these cases the constraint is not the lack of unmet needs, or of opportunities for productive employment, but the limited technical and administrative capacity to identify, design and execute projects.

This represents a significant challenge when PWPs are repeated in the same location over many decades, and where technical capacity to design and select assets for creation under PWP is limited, as is the case in most developing countries. In some type B programmes this has led to the provision of private as well as public goods through PWP (CSE, *op cit*) but more generally, these constraints have resulted in the construction of substandard assets (in both type A and type B programmes), an issue which is widely reported anecdotally, but has rarely been formally documented in the literature, which remains largely silent on issues relating to the quality, as well as the impact of PWP asset provision⁹². This problem of asset quality is particularly acute where the act of asset creation is only required for the sake of providing a work conditionality for essentially ideological reasons related to concerns around dependency. In such situations there is not necessarily an expectation that the work component will result in the provision of assets which will have meaningful impacts on

⁹² Jenden (2002:4) argues with reference to a DFID-funded PWP in Wollaita, Ethiopia, that ‘while the [PWP] public goods are deeply appreciated by farmers and local government, there is little evidence that they are being appropriately maintained on any sustainable basis, or that the improved infrastructure has in itself generated new income-generating opportunities for any but the richest households.’

livelihoods. In these instances, the question of paying a premium for the utilisation of a PWP rather than alternative social protection instrument, on the basis that this approach is delivering both a cash transfer and economic assets, is particularly problematic (the issue of the PWP 'premium' is discussed later in this chapter). This situation is compounded by the lack of accountability on the part of PWP implementers regarding the quality of assets provided, and the lack of voice on the part of 'beneficiaries' to offer feedback on the actual, rather than anticipated value of the assets created.

Some type B PWPs (the US New Deal and Argentinian Jefes PWP) managed to provide an adequate supply of employment while also creating economically and socially meaningful assets and services, simultaneously delivering on asset provision, employment creation and social protection objective sets. The New Deal programme explicitly included a capacity development component at the outset of implementation, while the Jefes programme was reliant on the capacity of local non-governmental organisations to administer micro projects. Here the fundamental constraint is the level of skills available to the programme, which would affect not only direct implementation capacity, but also skills development potential within the organs of state at all levels, and also civil society (being contingent on an adequate base level of literacy, numeracy, core skills, institutional development, etc). The unemployed in the US in the 1930s came from across the skills spectrum, creating a pool of skilled unemployed who could be deployed in programme design and implementation, and also skills development (Harvey, 2007a). Such a cadre of educated and skilled unemployed do not exist in many LIC and MIC contexts, and likewise civil society and the NGO sector are too weak, particularly in sub-Saharan Africa, to play a major role in type B PWP implementation. As a consequence, lack of capacity to identify projects which are consistent with local development and service delivery needs, to design them and have them ready 'on the shelf' for implementation, with adequate management capacity, remains a key constraint to the provision of the quality assets and services which could potentially promote social protection outcomes through type A and B programmes.

Type C PWPs, by contrast, tend to focus more on the quality of assets provided, as asset provision is their core objective, with labour market benefits representing positive

externalities of the supply of assets. PWPs implemented under the ILO's EIIP are typical of this kind of type C, labour-based infrastructure programmes (LBIP). The ILO is sanguine about the limited nature of the wage benefits accruing to participants from such programmes, arguing that this will only provide a 'temporary income boost' (ILO, 2003:44)); it is not PWP employment *per se* which will have a sustained impact on livelihoods, but rather the assets created through the programme. This idea is important to explore, and is clarified in the following description of employment in a typical ILO LBIP:

'The typical worker on a labour-based infrastructure programme is an underemployed casual labourer. Care is taken to ensure that the wage is set at a level to help lift workers' families out of severe poverty but avoid attracting employed workers away from other income-generating activities. [...] *Poverty is reduced in the short term by the increased incomes of workers on the project and in the longer term through the provision of public goods vital to increasing income-earning prospects for the community as a whole.*' (*ibid*:43, emphasis added)

This confirms the assertion that it is the assets provided through PWPs which are critical to the attainment of sustained social protection outcomes in the case of PWP offering short-term type C employment. It is useful to highlight the fact that two different causal chains between PWP implementation and social protection outcomes are implied by the discussion in this chapter. In type A and B programmes, it is employment which is perceived as the primary means for addressing social protection, mediated through wage income, which in turn will promote social protection outcomes. By contrast, in type C programmes it is primarily the creation of assets which, it is assumed, will promote livelihoods, and in turn lead to social protection outcomes. These differing causal chains, however, need to be considered in the particular labour market context. For example, as argued in chapter five, the wage benefits accruing from any short-term PWPs are unlikely to confer significant social protection benefits in the context of chronic unemployment, and for this reason the function of the assets created also becomes a key determinant of any sustained livelihoods, and by implication social protection benefits, arising from short-term PWP employment in such a context. In this way, although asset creation may not be the primary objective of a type A PWP, the extent to which such a programme has a sustained social protection impact may, in fact, be determined by the quality and relevance of the assets it produces.

6.2 Value of Assets Created

The foregoing analysis has highlighted the critical importance of attempting to capture the value of the assets created, in order to explore their potential social protection impact. However, within the PWP literature, it is in most cases not possible to assess empirically the value of the assets created, in terms of their social protection or livelihoods impact, due to the scarcity of appropriate monitoring and evaluation data. As a result of these data lacunae, the impact of the asset vector of PWPs on social protection is frequently assumed, but cannot be directly evaluated in most cases. This is particularly problematic in type A and C PWPs, where the monitoring timeframe does not extend beyond the period of direct programme implementation. This problem has been identified by Ravallion who concedes that there is a need to consider a programme's impact after the period of construction and wage disbursement:

‘The study period is rarely much longer than the period of the program's disbursements. However a share of the impact on people's living standards may occur beyond the life of the project’ (2003:10).

While this approach recognises in principle the critical importance of post-PWP beneficiary impacts, Ravallion only includes within his subsequent discussion the ongoing effects of the episode of wage transfer, rather than also addressing the ongoing impact of the assets created. The lack of post-construction analysis of the productive value of assets created is a critical omission in the literature, rendering even the Ravallion PWP appraisal framework (discussed in chapter four above), which attempts to accommodate assets within the evaluation process, highly problematic, since it remains dependent on heroic assumptions about asset performance over time, rather than empirical evidence. The implications of these analytical constraints are explored in detail below.

6.3 Livelihoods Benefits

In the context of chronic or cyclical unemployment, sustained social protection benefits accruing from infrastructure provision are contingent on the impact of the intervention on livelihoods. This can be mediated through two channels: i) the direct and indirect income-generating potential of the assets created and/or ii) service provision benefits arising (e.g.

from improved access to health care or education resulting from clinic or school construction, or improved road access to existing facilities). It is these 'livelihoods effects', which may or may not be significant, that are likely to be the primary determinants of the poverty alleviation and social protection impacts of type A and C PWP over time (i.e. in the absence of an ongoing cash transfer). The lack of monitoring and evaluation of this aspect of PWP performance is problematic, but its significance is not recognised among donors or implementing agencies, who display a systemic lack of interest in the value of assets and services provided. This is illustrated by the fact that even in major current PWP, such as the World Bank and DFID-supported Social Action Fund PWP in Malawi, the South African government's EPWP and its predecessor, the Community Based Public Works Programme (CBPWP), evaluations of the productive value of PWP assets have not been carried out, despite the fact that the major rationale for the implementation of this form of social protection is the stimulation of local and national growth through the provision of public assets (see Malawi, Ministry of Economic Planning and Management (2003), and Phillips (2004) respectively). This lack of donor scrutiny undermines the possibility of assessing the role of PWP assets as a vector of social protection benefit transmission, as well as the cost effectiveness of PWP as social protection instruments more generally. As a consequence of this lack of scrutiny, there is little evidence of positive livelihoods impacts arising as the direct or indirect result of the creation of PWP assets in such programmes (or for that matter evidence to the contrary), since data are typically not gathered on this aspect of PWP performance, despite this being an intrinsic, albeit in some instances secondary, component of programme objectives.

This failure to evaluate the benefits of infrastructural assets is partly due to methodological difficulties relating to the evaluation of infrastructure programmes more generally, a fact acknowledged in the 2004 *World Development Report*. Within the PWP discourse, this generic difficulty in attributing impacts to infrastructure provision is compounded by the implicit assumption that the creation of assets such as roads or community structures will *de facto* offer significant and sustained benefits, either to participants, or the broader community.

There is little research indicating that the assets created in short-term PWP offer direct (or indirect) benefit to poor communities or those participating in the PWP. In some instances the construction of a road may have positive direct and indirect effects for a community, but this cannot be assumed *a priori*, and it is critical that this assumption is evaluated. A recent study in South Africa highlighted the potential for discrepancies between the aspirational objectives and actual outcomes in a rural road-construction programme, attributing this to the inability of asset creation alone to promote livelihoods in the absence of coordinated rural development initiatives (Mashiri and Mahapa, 2002). The institutional and developmental ‘isolation’ of PWP also contributes to the fact that assets created under PWP are perceived, in many instances, to be white elephants,⁹³ largely as a result of their non-strategic selection and the fact that they are uncoordinated with other local development initiatives⁹⁴, although it is not possible to substantiate this perception empirically, given the lack of analysis of the use of PWP assets post construction. This problem is particularly acute in situations where asset construction is the positive externality, rather than the primary PWP objective, since labour absorption, rather than strategic asset selection, is the priority in such instances; or where PWP are implemented outside regular government structures, for example, through PMUs or NGOs whose activities may not be adequately aligned with local government infrastructure development priorities. These concerns illustrate the problem with the assumptions underlying the creation of assets through PWP, and raise the importance of the institutional location and the linkage of PWP with other developmental initiatives if the potential benefits accruing from the assets created are to be captured. This issue of PWP institutional isolation – and the need for such programmes to be implemented with reference to broader social development plans – has been identified as a key factor undermining the potential impact of the South African EPWP

⁹³ For a discussion of the political function of ‘white elephant’ projects see Robinson and Torvik (2005) who define such projects as ‘investment projects with negative social surplus.’

⁹⁴ Reports of such constructions under the auspices of type A PWP are many. One example of this is multipurpose community centres constructed on the outskirts of many conurbations in Limpopo, South Africa under the national PWP (CBPWP) without adequate community ownership. The buildings were not used by the community, and left empty they were subsequently used for prostitution and drug selling (P. Ndhundhuma, Chief Executive Officer, Khanyisa Integrated Development and Social Research, Tzaneen, Limpopo, June 2003, pers. comm.).

in terms of livelihoods promotion and contribution to local economic development (Karuri *et al.*, 2007; Phillips, 2008).

The value of assets created is undermined in many cases by lack of clarity relating to ownership of a PWP asset post construction, which is particularly problematic when an asset, such as a road or dam, is created outside normal community or local government structures, for example, by an external donor or NGO. In many cases, failure to clarify issues relating to ownership and responsibility for PWP asset maintenance and repair, and the allocation of adequate budgetary allocations to cover the recurrent costs of PWP maintenance, are major factors contributing to the rapid deterioration of asset quality and viability in terms of contributing to improved livelihoods. This failing undermines the potential benefit of the asset vector of a PWP, and the resulting deterioration of assets created can reduce the cost effectiveness of asset creation through the PWP process (UK DFID, 2003a).

The foregoing discussion has highlighted the general lacuna relating to the evaluation of the assets created under PWP. However, as has been argued above, the creation of a viable asset is not necessarily synonymous with livelihoods improvements; there is a need to go beyond the quantification of the economic value of the assets over time, and a need to interpret this in terms of the potential economic growth and livelihoods impact of these assets, and then to assess the likely social protection consequences. These issues will not be explored further in this thesis, but are identified as a critical area for future research, without which it is difficult to assess adequately the social protection impact of the asset component of PWP implementation. However, the related question of benefit incidence is explored further below, in terms of considering to whom the (putative) social protection benefits of the assets created will accrue.

6.4 Incidence

In assessing the social protection function of assets created under PWPs, it is essential to consider the question of incidence. The critical question is the incidence of any livelihoods benefits arising as a result of the construction of PWP infrastructure, i.e. which segments of the population benefit from the creation of PWP assets and over what time horizon. These

questions have experienced only limited critical scrutiny in the literature, and have not been explored in relation to type A and C programmes⁹⁵. A related issue, which has also been largely ignored in the literature is the tension between the creation of assets which may promote development and sustainable livelihoods for the poor in the short term, such as improved irrigation, but may not contribute significantly to national growth, and those which may promote national growth, but may not have a significant impact on the livelihoods of the poor in the short to medium term, such as road infrastructure. These are some of the key questions which remain unexplored in the PWP discourse, and are often conflated in the popular political discourse around PWPs, leading to expectations that generic PWPs can contribute to both local and national growth and development objectives, irrespective of programme type, size or the relevance of the assets created. In most instances, the contribution of PWP assets to the livelihoods of intended beneficiaries remains unmonitored, despite the critical importance of the asset creation function of PWPs in the decision whether to adopt PWPs or alternative social protection instruments.

6.5 Asset Costs and Benefits

Assessing the value of the asset created through PWPs over time, and the distribution of resulting benefits, is of critical importance in determining the effectiveness of PWPs as social protection instruments, and is particularly significant given the high cost of the non-wage component in PWP budgets,⁹⁶ which is consumed by material and management costs. This renders the net cost of a unit of currency transferred through a PWP significantly higher than if alternative measures were adopted,⁹⁷ an insight accepted by the World Bank, who concede that:

⁹⁵ Such analysis has been carried out primarily in relation to type B programmes, which with their longer operational timelines offer greater ease of analysis.

⁹⁶ Wages typically comprise only 30% to 60% of the total programme cost (Subbarao et al. 1997:80).

⁹⁷ Smith calculated a per unit cost of 13.9 to transfer a unit to the poorest in Malawi through public works, compared to 1.73 through cash transfers (Smith 2001:39). While it was argued in chapter four that such comparative analysis is fundamentally flawed, Smith's analysis is nevertheless indicative of the significant additional costs which must, de facto, be included in a programme which includes the production of physical infrastructure.

‘Workfare programs are not necessarily an inexpensive way of delivering benefits to poor people.’ (2001:155)

While it may be possible to ascertain the cost of a unit of currency transferred through PWP, however imperfectly, given the inconsistency in assessing PWP costs in the literature, as discussed in chapter four, and to argue that these costs are higher than those associated with alternative social protection instruments such as cash transfer programmes, this analysis is problematic as it excludes any consideration of the value of the assets created, effectively reducing their discount value to zero, and failing to take account of either the assets’ potential social protection impact, or their impact on broader economic growth.

Since there are significant methodological problems associated with assessing the cost of assets created through a PWP, and frequently also a reluctance on the part of donors or implementing agencies to evaluate the quality of the resulting product, any attempt to compare the relative costs of asset production using conventional and labour-based PWP approaches is highly problematic, rendering the calculation of any possible premium associated with the adoption of labour-intensive, PWP approaches over alternative asset production modalities, problematic.⁹⁸ Similarly, assessing the social protection impact of PWP assets, mediated through ongoing livelihoods improvement, is highly problematic, particularly on a comparative basis. Hence, attempting any meaningful cost effectiveness of the asset vector is an extremely complex operation offering only limited insights. It is, however, possible to argue that unless the assets or services provided through a PWP are of value in terms of promoting either livelihoods or growth improvements, then any premium associated with the adoption of LBIP over conventional construction methods, or PWP, rather than alternative social protection instruments, such as cash transfer, would be hard to justify in terms of economic efficiency⁹⁹.

⁹⁸ This problem does not occur in the case of social infrastructure provision (social service delivery) PWP, as the provision of such services is de facto inherently labour intensive.

⁹⁹ The extent of such a premium will vary on a case by case and country by country basis, depending on consideration of relative factor costs, which will be informed by the wage level, accessibility of plant, remoteness of project areas, etc.

6.6 Determinants of Asset Quality

The critical determinant of the social protection potential of the asset or service provided through a PWP is the quality of the asset created. Subbarao identifies this as a critical issue, arguing that:

‘Careful attention to detail is needed to attain a high labor intensity without compromising the quality of assets created.’ (2001:vii)

While this argument is generally made with reference to physical infrastructure, which accounts for the majority of PWPs, it also applies in terms of the quality of social service provided through PWP. The key factors influencing the quality of physical assets created are: appropriate asset selection, design, maintenance and usage, which together determine the sustainability of the asset provided, and its impact. These issues are discussed in turn below.

6.7 Asset Selection

The quality of assets created is determined *a priori* by appropriate asset selection, which is affected by whether the asset has been identified in local development plans, or is integrated with these plans in some way, and whether the selection of the asset was owned or informed by the local community and/or local government. The strategic function of the assets created, in terms of their potential impact on livelihoods, is also critical, as is consideration of whose livelihoods will be served by the provision of the asset. Within the CBPWP in South Africa, populations were given a menu of physical assets from which they could select the most appropriate for their community, resulting in the expression of a very constrained set of community preferences, which may not coincide with the priority needs within the community. Lack of local government and community involvement in asset selection is potentially a problem for PWP assets when programmes are implemented externally to government structures by parallel agencies, such as the Programme Management Units (PMUs) which are frequently tasked with implementing donor-funded PWPs, and stand outside regular government administrative structure, such as the MASAF and European Union (EU) PMUs in Malawi. The existence of such PMUs reduces the likelihood of PWPs being integrated into local planning processes and priorities.

Once the asset has been selected, design considerations offer the next set of opportunities for asset quality to be compromised within a PWP. Operational pressures to implement programmes in situations of constrained technical capacity sometimes result in programmes which may not be sufficiently adapted to local requirements, and instances have been documented in type A PWPs where caps on non-wage spending have forced design compromises and the adoption of inferior and less sustainable construction methods. Expenditure restrictions on capital-intensive components of otherwise relatively low capital cost infrastructure such as roads, in order to comply with budgetary requirements for 40% of the programme budget to be allocated to unskilled labour have undermined the viability of some assets created under the MASAF programme, rendering some PWP roads unusable during the rainy season due to the lack of bridges (UK DFID, 2003a). Similarly in the case of the Gundo Lashu programme, the selection of road sealing materials was informed on the basis of cost rather than appropriateness or durability in order to retain the desired labour/material ratios.¹⁰⁰ This issue is particularly problematic where fixed capital labour ratios are retained in the context of capital goods inflation which outstrips labour inflation. Even where assets are appropriate and have been correctly specified, implementation shortfalls may undermine asset value, given limited local engineering capacity for management and oversight, and may render PWP created assets inferior to those created using conventional planning and implementation approaches as part of ongoing governmental workplans. For example, in their evaluation of the second component of MASAF, the World Bank concluded that:

‘There are [...] indications that MASAF structures may not meet strict technical standards, as low calibre inputs seem to have been used in a lot of instances. There is therefore need for MASAFIII to pay particular attention to issues of coordination and quality.’ (2004b:39)

However, this issue is largely ignored in the literature, and there is little empirical evidence on which to assess the gravity (or otherwise) of the issue, or its implications for the continued adoption of PWPs.

¹⁰⁰ M. Mondlane, ILO Advisor to the Gundo Lashu PWP, South Africa, 2003, pers. comm.

6.8 Maintenance and Recurrent Costs

Where physical infrastructure is created, the critical question of sustainability is frequently overlooked, and in the absence of adequate maintenance, assets and their potential positive livelihoods benefits deteriorate rapidly (see Jenden (2002)). One aspect of sustainability is the provision of funding for ongoing recurrent costs relating to the asset, in terms of maintenance in the case of physical infrastructure, and in cases where the assets which have been constructed are schools or clinics, sustainability requirements include the provision of funding for recurrent costs such as staffing and material costs, as well as the availability of the personnel required to run the utility. This is linked to the question of asset ownership, both in legal terms and in community terms, and raises the issue of responsibility for utilising and maintaining the asset once it has been created through the PWP. This is particularly problematic when PWPs are implemented outside the normal government structures for asset creation, often resulting in the creation of unfunded recurrent liabilities for local government, which can lead to poor asset management and maintenance post PWP completion. These issues are rarely discussed in the PWP literature, as the problems tend to emerge only after the programme implementation and evaluation timeframes have been completed.

6.9 Usage

In terms of ascertaining the social protection benefit of the asset created, ultimately it is necessary to know the benefit incidence, i.e. whether the asset is fit for purpose, by whom it is utilised, and what benefits it confers; questions which relate directly to whether the assets created have a 'pro poor' orientation (Devereux and Solomon, 2006:23). The potential social protection impact of the asset can be ascertained by assessing whether local users perceive that a viable asset or service been provided, and are using it, or whether the benefits accruing from the asset were limited to the period of wage receipt. However, this critical issue which can only be ascertained post asset completion, is typically excluded from PWP evaluation processes, rendering an assessment of the benefit accruing from the asset, and by which segments of the community the benefits are being captured, highly problematic. The question of asset benefit incidence has been examined in a limited number of studies in India

(Dev, 1995; PEO, 1980 cited in Devereux and Solomon, (2006)) but there is no comparable or detailed exploration of this issue in the literature with respect to assets created under PWP in sub-Saharan Africa, in terms of their quality, incidence and social protection impact¹⁰¹.

6.10 Conclusion

If the assets produced through a PWP were to be assessed as a potential vector of social protection benefit, it would be necessary to identify the form and cost of the benefit, to quantify its value over time, and to assess to whom the benefits accrue, in this way inserting PWPs into a conventional infrastructure evaluation framework. However, such an approach has been absent from the literature to date, (with the notable and single exception of WFP et al., (1985)¹⁰²) and the data required to perform such an analysis are not available. In the light of these omissions drawing empirically based conclusions regarding the effectiveness of the asset creation vector in terms of its social protection impact is problematic.

Where labour market outcomes rather than asset production are the primary objective, i.e. in type A and B programmes, the creation of assets is essentially a means to satisfy the work conditionality; a positive externality. In these instances, if the creation of quality infrastructure is not compromised by the dominant need to create large-scale work opportunities, the assets created may offer benefits to participants, but this outcome is contingent on the range of programme design issues outlined above. Where the production of the asset is the primary programme objective, as in type C programmes, and employment creation the externality, it is likely that asset quality would be superior, however even in these instances there is a lack of robust evidence on the impact of the assets created on livelihoods, and ultimately social protection. Even in instances where the limitations of the

¹⁰¹ There have been a small number of studies which have examined some of these issues on a limited scale, such as Jenden's evaluation of a NGO-implemented PWP in Ethiopia, which includes some analysis of to whom PWP asset benefits accrue (Jenden, 2002). Recently, more work has been carried out by Sharp and others examining incidence, (Sharp, 2004, Sharp et al., 2006) but again, this has been limited to Ethiopia, and there is little such work in the rest of the continent.

¹⁰² WFP, together with BIDS and IFPRI produced a report on an evaluation of food-for-work programmes in Bangladesh, which attempted to quantify the incremental income attributable to the construction of feeder roads and other physical infrastructure.

social protection impact of the wage vector are acknowledged, as in short-term ILO EIIP PWPs, there is little focus on creating an evidence base on the socio-economic impact of the assets created; a position which is in tension with the inclusion of social protection objectives within the rhetoric surrounding such programmes. Recent exploratory research by the ILO in Ethiopia to examine the short-term effects of employment intensive projects has confirmed the argument outlined in this and the preceding chapters, that neither the construction of PWP assets nor the provision temporary employment which type C programmes offer, resulted in significant social protection benefits for participants, even in the short term:

There has not been any noticeable change in aggregated measures of poverty, which is expected as improved performance in the study area would depend not only on the implementation of employment intensive road works, but on accompanying interventions to achieve sustained poverty reduction. (Osei-Bonsu and Mengesha, 2007:18)

The key problem, however, throughout all PWP types, is that empirical analysis of the livelihoods value of the assets created is typically not addressed in programme evaluations, and nor are questions relating to the incidence of asset usage. In addition to this, questions relating to identifying the cost premium (if any) of adopting LBIP compared to alternative more capital intensive modalities of asset production, are not routinely assessed. As a consequence, in many instances it is not known if there is a cost premium associated with creating assets using labour intensive PWPs rather than conventional means, or the magnitude of the premium (or the extent to which there is a commensurate cost in terms of quality reduction). McCutcheon and others have argued extensively that with the relative factor costs which tend to prevail in LICs in much of sub-Saharan Africa, there is no additional premium associated with LBIP if the techniques are appropriately applied (McCutcheon, 1995, 2001a, 2001b and 2001c). This conclusion is mirrored by Devereux and Solomon, who argue, on the basis of a range of comparative studies, that 'labour-based options are, on average, about 10-30% less costly in financial terms than equipment-intensive options' (Devereux and Solomon, 2006:5). However, in some countries such as South Africa, the issue remains highly contested within the industry (Mabilo 2003; McDermott, 2006; Karuri *et al.*, 2007), and recent research attempting to clarify the relative

costs of capital and labour intensive construction in that country has been ambiguous (Taylor *et al.*, 2005). Devereux and Solomon endorse McCutcheon's argument, suggesting that the key factors determining cost savings through LBIP are 'careful site selection, close supervision of the production process, and application of proper production techniques' (Devereux and Solomon, 2006:6). Unfortunately, these are just the conditions which tend not to prevail in many construction-based PWPs due to lack of adequate technical and administrative capacity.

Lack of information on the impact and cost of social protection benefits accruing through the asset vector in PWPs render any general conclusions in this area problematic, and as a consequence, it is not possible to identify either what social protection benefits the asset vector might typically deliver in the different types of PWPs, to whom any such benefits might accrue, the additional premium associated with choosing to create assets in a labour intensive way through a PWP; or the relative cost effectiveness of attempting to deliver social protection benefits through PWPs rather than through alternative social protection instruments.

Concerns about the efficacy of PWPs in relation to asset provision are largely based on anecdotal evidence, given the failure of implementing governments, NGOs or donor communities to examine these issues critically, or to evaluate PWP assets over time in terms of asset quality, usage and impact, after the period of PWP wage transfer has been completed. This represents a challenge in assessing the impact of infrastructure provision on livelihoods which extends beyond the confines of the PWP debate, but nonetheless this question is key in attempting to assess the potential social protection function of PWPs. Devereux and Solomon (2006) argue that there is evidence of PWP-created infrastructure directly contributing to livelihoods, and as evidence for this, cite a study carried out in Bangladesh into the impact of a PWP constructed feeder road which documented improvements in access to services and markets resulting in increased production. However,

it is notable that they draw on a study from 1983¹⁰³ due to the lack of more recent evidence to support empirically their assertion that PWPs can have positive impacts on livelihoods, and the implication of this is not lost on them:

‘Though more than 20 years old, this remains a pioneering study and one of the few comprehensive evaluations of the impacts of a rural employment creation programme. One obvious implication is that more studies of this kind are long overdue.’ (Devereux and Solomon, 2006:16).

For PWPs providing social rather than physical infrastructure (social services, such as ECD and HBC), there is likely to be a significant impact on the poor, by relieving the domestic burden of caring for children and the sick and thereby freeing scarce labour for alternative household supporting activities. But again, no empirical evidence is currently available which attempts to quantify the social protection impact of such PWPs.

The critical problem is that neither the cost premium nor impact of PWP assets is empirically assessed in the mainstream literature, and that this lacuna is not identified as an issue of concern or import within the social protection discourse. In the absence of such data, it is not possible to draw conclusions regarding the efficacy of the asset vector as a source of social protection benefits to those participating in PWP.

There are only a very limited number of references to this research lacuna in the literature. Ravallion’s recognition that there is a need to consider a programme’s impact after the period of disbursement is almost unique in the literature, as evaluation tends *de facto* to be restricted to the period of programme implementation and disbursement, and so excludes an assessment of any sustained objectives ascribed to the programme, including benefits accruing from the livelihoods impact of assets created. This is a significant omission in terms of the preceding discussion of the social protection impact of PWP assets, as the ability to assess asset impact ‘beyond the life of the project’ is critical. Moreover, the assumed linkage between asset provision and livelihoods improvements is not empirically explored in the PWP literature, nor the secondary linkage between asset-based livelihoods benefits and social

¹⁰³ WFP /BIDS/IFPRI (1985).

protection, while the critical question of the incidence of these benefits, such as they might be, is largely absent from the discourse, compromising any attempt at an empirically founded analysis of the social protection benefit of PWP asset provision. A review of the available literature and existing PWPs suggests that, ultimately, the conclusion can be drawn that the assumptions within the literature and policy environment that the assets created through PWPs will contribute to sustained livelihoods benefits for participants may, in many cases, particularly in type A and B programmes, be little more than platitudes informed by wishful thinking, rather than any empirical evidence.

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7 THE THREE VECTORS: SKILLS

The third vector through which social protection benefits may be conferred upon PWP participants is through skills development and work experience, on the basis of the argument that the acquisition of such qualities will improve the supply side characteristics of PWP participants and hence improve their employability, resulting in improved employment performance with social protection benefits accruing from increased wage income over time. In this way, the relationship between skills development and social protection is somewhat etiolated, yet remains at the heart of many PWPs, either as an explicit objective, or as an assumed beneficial externality. Increased ‘employability’ after PWP participation is assumed to occur through one of two distinct processes, either through self employment or through employment in the formal or informal sectors, and the aspiration is often articulated that this approach may be used to address both frictional unemployment, and also to stimulate aggregate increases in employment. These issues and the assumptions underlying them are explored in detail below, drawing on a case study from South Africa, the Expanded Public Works Programme (EPWP), and an attempt is made to assess the viability of the objectives associated with the PWP skills development argument, within the context of chronic unemployment.

7.1 Conceptual Clarifications

Before discussing the question in more detail, it is useful at this point to articulate the conceptual considerations underlying the broad ‘skills development and training’ approach, as used within the PWP discourse.

There are two major assumptions underlying the labour market objectives of this form of intervention; the first is that skills development is an effective response to labour supply constraints, and that an intervention to address supply side issues will reduce frictional unemployment, and the second is that skills development can stimulate endogenous demand for labour, in part through the development of SMMEs and self employment opportunities. It is argued in this chapter that the probability of either of these assumptions being realised is intimately linked with the nature of the labour market context.

A PWP with such objectives would conform to the type D PWP within the typology proposed in chapter two, and an example of such a programme would be the Irish Community Employment Programme (CEP)¹⁰⁴. However, while type D PWPs which explicitly address skills development and frictional unemployment are widespread in OECD countries, they are rare in developing and middle-income countries. This type of intervention is associated in design and intent with the current European policy of labour market ‘activation’, which aims to promote labour market participation by those perceived as ‘disadvantaged’ in the labour market¹⁰⁵. The dominant type D OECD PWP model provides a combination of work experience, skills development and labour market counselling in an attempt to assist the unemployed to take up existing employment opportunities, setting a time limit to the period of eligibility for receipt of the PWP wage as a further incentive for the unemployed to take up available work, thereby attempting to reduce ongoing frictional unemployment. This represents an attempt to simultaneously improve the quality of labour supply, lower frictional unemployment, and reduce dependence on government funded social assistance payments (and hence the cost to the fiscus). Such an approach is rare outside OECD countries, but the debate and terminology have entered the international PWP literature, with South Africa adopting PWPs in preference to alternative social protection measures for the working age poor unemployed, reflecting the OECD preference for addressing the needs of this group through ‘activation’ strategies to bring them into employment, rather than adopting social grant options (Taylor, pers. comm., cited in Karuri *et al.* (2007)).

This approach is not limited to type D PWPs; there are many examples of other types of PWPs including skills development components. Examples include the type A EPWP in

¹⁰⁴ The CEP was initiated in 1994 with the objectives of: providing temporary opportunities for long-term unemployed and socially excluded persons, providing opportunities for individual training and personal development, providing economic and social benefits to communities, contributing to the local development strategies, and increasing participants subsequent job/income prospects (Deloitte & Touche, 1999:63).

¹⁰⁵ See, for example, the centrality of the activation concept in the UK’s active labour market policy as set out in their ‘Ready for Work’ strategy (United Kingdom, Department for Work and Pensions, 2007).

South Africa, mentioned above, the type C AGETIP in Senegal, and the type B Jefes Programme in Argentina (offering guaranteed employment, for a maximum period of five years) each of which explicitly includes among their stated objectives the reduction of frictional unemployment and expansion of aggregate employment through skills development. The term ‘type D interventions’ will be used in this chapter to include both type D PWPs (such as the Irish CEP) and also the skills development components of other types of PWPs with skills development objectives.

7.2 Labour Market Assumption Underlying Type D Interventions

It is interesting to note that skills development and training is not included as a vector of PWP social protection in the MEGS or the NREGP, which characterise the function of the PWP not as a ‘treatment’, with a transformational social protection outcome, but as a source of guaranteed and ongoing cash based state support. This contrasts with the belief inherent in type D interventions that through a treatment of the participants, their labour market characteristics can be improved such that their relationship to the market, post PWP employment, will alter significantly, with market clearing at lower levels of unemployment, a reduction in frictional unemployment and increased levels of aggregate employment. This is indicative of a fundamentally different conception of what a PWP is, its social protection function, and the potential of the market to offer a response to the unemployment problem. Type D interventions are based on a fundamental belief in the possibility of market-based ‘solutions’ to unemployment, which by definition, do not require ongoing support from the state.

Type D interventions dominate both the PWP discourse and programming, particularly in sub-Saharan Africa, and their success is contingent on i) the existence of frictional unemployment, and ii) the scale of such frictional unemployment relative to the level of unemployment, such that it has the potential to absorb a significant proportion of the unemployed. Any assessment of the extent to which type D interventions can address unemployment on a significant scale is then contingent on whether the scale of unmet demand in relation to the scale of unemployment offers sufficient space for significant levels of labour absorption, and whether PWP ‘treatment’ can offer the transfer of skills and

experience, such that labour exits programmes equipped with skills for which there is an unmet demand. These issues are examined in detail below.

7.3 How Can Employability be Enhanced?

Type D interventions can either attempt to promote skills relating to ‘employability’, resulting in participants attaining employment in the formal or informal labour market, or they can attempt to stimulate various forms of self employment, ranging from the promotion of subsistence agriculture or survivalist micro-enterprise¹⁰⁶ to small and medium enterprise (SMME) development. Examples of PWP aiming to promote survivalist or micro-enterprise activities are the PSNP in Ethiopia and the DFID-funded Central Region Infrastructure Maintenance Programme (CRIMP) in Malawi (Pinder, 2001), while the AGETIP in Senegal and the EPWP in South Africa are examples of PWPs with objectives relating to the stimulation of larger scale SMME development (McCord, 2007b). This chapter will primarily focus on examining the success of PWPs in relation to the first type of skills development, i.e. promoting employability, although the impact of PWPs on entrepreneurial activity ranging from survivalist to SMME activities will also be discussed, drawing on evidence from Malawi and South Africa.

7.4 The South African Expanded Public Works Programme (EPWP)

The South African EPWP is a type A PWP incorporating type D components and explicit skills development objectives. The programme was launched in 2004 with the aim of providing between 100,000 and 200,000 short-term jobs each year over a five year period, providing skills training and work experience during the episode of PWP employment. The EPWP is primarily a labour-based infrastructure programme (LBIP) PWP offering a single short-term episode of employment to participants. Some 75% of the ‘job opportunities’ it provides conform to conventional type A PWP employment in the construction sector, while the other 25% comprises employment in the social services (ECD and HBC) SMME development, and environmental rehabilitation (McCord, 2007a). The programme has a

¹⁰⁶ For a discussion of this concept see Devey, Skinner and Valodia (2003).

range of objectives, including the provision of a wage transfer, asset creation and skills development (Karuri *et al.*, 2007). The type D ‘skills development’ component of the programme is premised on the assumption that the acquisition of skills and workplace experience during the period of PWP employment will be adequate to improve participants’ labour market performance, on the basis of the implicit assumption that the labour market problem is, to some significant degree, one of frictional unemployment.

This approach is consistent with the overall South African labour market policy, which is focused on the promotion of GDP growth as the primary engine to increase aggregate employment, and the adoption of a high skills growth strategy (Kraak, 2005)¹⁰⁷. In addition, there are a limited number of skills training interventions (although outside the EPWP there are no skills training programmes for which the unemployed are eligible), together with an emphasis on the development of SMMEs and the promotion of Black Economic Empowerment (BEE), in order to redress the economic and labour market exclusion and segmentation arising from over a century of racialised economic and labour market policies. Besides modest increases in government expenditure in infrastructure provision, and some reduction in labour market regulation (Growth and Development Summit, 2003; ANC, 2005), the main government intervention for the unskilled unemployed is the EPWP, which is ascribed considerable potential in terms of addressing the core challenge of unemployment.

However, despite the EPWP’s policy prominence, the labour market impact of the training component of this programme has not been studied systematically, from either a theoretical or empirical basis. This case study provides a critical analysis of the programme from both perspectives in an attempt to illuminate the key issues relating to skills development as a vector of social protection in PWPs generally. The case study findings suggest that short-term PWPs are unlikely to have a significant impact on skills development or unemployment in contexts of chronic unemployment, excess supply of low and unskilled labour, or where

¹⁰⁷ For a critique of the selection of a high skills growth strategy in the context of South Africa, given the limited level of low skilled employment, see Ashton (2004).

the overall government labour market strategy is founded on the premise of high skills growth.

7.5 The Skills Development Objective of the EPWP

The objective of the EPWP is to:

‘... provide poverty and income relief through temporary work for the unemployed to carry out socially useful activities’ while at the same time equipping participants ‘with a *modicum of training and work experience*, which should enhance their ability to earn a living in the future.’ (Growth and Development Summit Agreement, June 2003)

It is interesting to note that while the terms ‘training and work experience’ are often used almost as a collective noun in the PWP discourse (as implied in the quotation above), there is at the same time an explicit recognition in the EPWP documentation that without the skills development component, the work experience impact of temporary PWP employment would be of limited value:

‘... job creation *without* skills development, upgrading and training, does not lend itself to sustainable employment and will have no long-term economic impact on the lives of the unemployed....’ (EPWP, 2004c, citing the Growth and Development Summit, 2003)

This insight is important, suggesting that labour market experience alone, without explicit skills development components, may not be sufficient for a PWP to meet its supply side objectives.¹⁰⁸ What is clear, in more general terms, from the quotations above, is that the EPWP has a transformative objective, with skills development being presented as the main vector for delivering this outcome. The objective of improving labour market performance through EPWP participation is reiterated throughout the EPWP documentation:

¹⁰⁸ Notwithstanding this caveat, labour market experience was accorded high importance in EPWP design due to the elevated levels of youth unemployment in South Africa, and the high percentage of the unemployed who have never worked; ‘The EPWP is an important means of providing exposure to the world of work in a context where a very high proportion of the unemployed have never worked. Indeed, in the 16-34 age group (which constitutes the “youth” category in terms of the Youth Commission’s definition) 70% report never having worked, while 59% of all unemployed people have never worked.’ (EPWP, 2005).

The EPWP is a nationwide programme covering all spheres of government and state-owned enterprises, that aims to draw significant numbers of unemployed into productive work *accompanied by training so that they increase their capacity to earn an income.* (EPWP, 2005)

This statement is reiterated throughout the EPWP literature which argues that the aim of the EPWP is ‘to utilise public sector budgets to reduce and alleviate unemployment’¹⁰⁹, with the proximate goal being the provision of temporary employment and the medium term goal being:

‘enhancing the ability of workers to earn an income, either through the labour market or through entrepreneurial activity’ (*ibid*)

This represents a vision wherein the immediate and temporary benefit of PWP participation is mediated through the wage vector (as outlined in chapter five), while the medium to long term social protection benefit results from the skills development vector. This suggests that the skills development component of the EPWP is conceptualised as a form of ‘treatment’, resulting in improved labour market characteristics for those who have passed through PWP employment, which, it is assumed will result in improved labour market performance. In this model, PWP participants enter the programme with one set of labour market characteristics which are in excess supply, and exit with labour market characteristics for which there is unmet market demand, resulting in increased rates of employment among EPWP graduates.

The analysis underlying this approach is predicated on the assumption that supply-side interventions can have a significant impact on unemployment among the unskilled or low-skilled:

‘Given that most of the unemployed are unskilled, the emphasis is on relatively unskilled work opportunities. All of these work opportunities will be combined with *training or education or skills development*, with the aim of *increasing the ability of people to earn an income once they leave the programme*. Together with the SETAs [Sectoral Education and Training Authorities], the Department of Labour (DOL) will coordinate the

¹⁰⁹ The objective of ‘alleviating’ as opposed to ‘reducing’ unemployment is in itself problematic, and of limited value in the context of chronic, rather than cyclical unemployment. See McCord (2005) on the limited value of temporary employment in situations of structural unemployment.

training and skills development aspects of the programme.’ (EPWP, 2005, emphasis added)

This statement reveals a series of prior assumptions which are implicit in the EPWP model and have a direct bearing on the potential of skills development to impact on employment; firstly, that the quality and quantity of skills or experience transferred is adequate to significantly alter the labour market characteristics of the participant; and secondly, that these additional skills or experience will translate directly into improved employment performance, with the latter assumption being conditional on whether the newly acquired skills match those for which there is frictional demand, and that the scale of frictional unemployment is sufficient to absorb all those who are newly skilled as a result of PWP participation. Each of these assumptions and contingencies is open to question, with the result that it is not axiomatic that PWP participation will result in improved labour market performance, and enhanced social protection.

However, the fundamental insight from the EPWP quotations above is that the characterisation of unemployment implicit within this analysis is essentially ‘frictional’. This mirrors the analysis underlying active labour market strategies in many OECD countries, and informs the selection of skills promotions interventions in these contexts. Whether such an analysis and policy response is appropriate in the South African context, with significantly higher levels of unemployment which is primarily structural, is open to question. Bhorat has outlined the key economic considerations underpinning the assumption that supply side interventions promoting skills acquisition by the unskilled represents a viable means for their integration into the labour force, arguing that:

‘... given the unevenness of the economy’s growth generation – both in terms of sectoral expansion and skills requirements – a fair degree of intervention is clearly required on the labour supply side. Put differently, the simultaneous existence of a skilled labour shortage *and* unskilled labour surplus, point to the importance of adhering to a policy framework that emphasizes both the need to kick-start economic growth as well as ensuring that the characteristics of the suppliers of labour match those in demand by growing sectors’ (2004:28)

This analysis is reflected in the thinking underlying the EPWP:

‘Two fundamental strategies underpin the government’s approach to reducing unemployment. Firstly, to increase economic growth so that the number of net new jobs being created starts to exceed the number of new entrants into the labour market, and *secondly to improve the education system such that the workforce is able to take up the largely skilled work opportunities which economic growth will generate.* Short to medium-term strategies have been put in place to contribute towards these strategies. The EPWP forms one of government’s short to medium-term strategies.’ (EPWP, 2005a, emphasis added).

The critical question, however, is whether improving the supply side characteristics of the unskilled mass of the unemployed through EPWP participation and training will enable them to take up the *‘largely skilled work opportunities* which economic growth will generate’? Thus, one of the key questions in the current policy discourse is: are supply side interventions an appropriate and significant response to the structural unemployment which characterises the South African labour market? When specifically applied to the EPWP the question becomes, do the experience and training benefits of participation in PWP enable labour to take up the limited number of *skilled* work opportunities for which unmet demand is known to exist?

In an attempt to answer this question, which applies equally in all contexts where skills development is anticipated to provide a vector for the transmission of social protection benefits, first the objectives and content of the EPWP will be examined in detail, and then the nature of demand for skilled labour within the South African economy will be compared with the skills development provided in the EPWP. Finally, the limited empirical evidence available on the performance of skills development in PWPs in South Africa will be reviewed to see if this offers any further insights and corroborates the conclusions of the more theoretical analysis.

7.6 Training in the EPWP

The EPWP provides PWP employment in four sectors: infrastructure, environment, social and economic. The infrastructure sector aims to provide 900,000 of the cumulative 1.3

million work opportunities to be created between 2004 and 2009, while the goal is to create 200,000 in the environmental sector, 150,000 in the social and 12,000 in the economic.¹¹⁰

In each sector, training is recognised as central, as clearly articulated in the EPWP Social Sector Plan:

‘One way of viewing the EPWP is as a bridge between unemployment and employment during which participants are equipped with skills and experience. As such the EPWP is exempt from much of the current labour legislation. In return for this exemption the programme is obliged to provide a higher level of training than participants would normally get in any other place of work. *Training is therefore the backbone of the EPWP Code of Good Practice. Developing the capacity to deliver on this commitment is critical to the success of the programme.*’ (EPWP, 2004a:28, emphasis added)

In recognition of the unskilled nature of most of the work opportunities offered under the EPWP, and hence the limited value of job experience *per se* in promoting skills development, it was planned to combine all the work opportunities created in the Social Sector ‘with training or education or skills development, with the aim of increasing the ability of people to earn an income once they leave the programme’ (EPWP, 2004a). ‘Learnerships’ are the main vehicle of formal training offered under the EPWP, providing workers with a combination of on-the-job experience, a stipend and training, which leads to National Qualifications Framework (NQF) qualifications and ‘*possible longer-term income opportunities*’ (EPWP, 2004c).¹¹¹ However, learnerships are only accessible for a small percentage of EPWP participants, and for the majority of participants, the training options are far more limited, as indicated in Table 7.1 below.

¹¹⁰ The figures discussed here are taken from the EPWP sector plans (EPWP 2004a, 2004b etc), and should be regarded as indicative only.

¹¹¹ Learnerships are a particular form of apprenticeship, which are defined within the EPWP thus, ‘A learnership combines work based experience with structured learning and results in a qualification that is registered within the National Qualifications Framework (NQF) by the South African Qualification Authority (SAQA). A learner who completes a learnership will have a qualification that signals occupational competence and which is recognised throughout the country. Each learnership consists of a specified number of credits and takes at least one year to complete. The learning may consist of a number of NQF aligned short courses, which make up the learnership curriculum. A learnership requires that a trainer, a coach, a mentor and an assessor assist the learner.’ (EPWP, 2004a: 4).

Table 7.1: Total Employment and Learnerships in the EPWP

Sector	Total temporary employment opportunities anticipated during the EPWP	Total learnerships anticipated during the EPWP	Number of participants receiving formal accredited training
Infrastructure	900,000	500	<1%
Environment	200,000	400	<1%
Social – (HBC and ECCD)	180,000*	37,000	20%
Economic	12,000	3,000	25%
TOTAL	1,292,000	40,900	3%

Source: McCord (2005).

Note: * Estimate based on outline in EPWP Social Sector Plan (EPWP, 2004a)¹¹²

Table 7.1 highlights the fact that for most participants, the training component of the EPWP will not lead to the acquisition of qualifications which would pull them into a higher skills bracket. Interestingly, the situation differs across the different EPWP sectors, which conform to different types of PWP employment. These will be reviewed in turn below.

7.7 EPWP Skills Development in the Infrastructure Sector

The infrastructure sector of the EPWP is typical of type A PWPs in the developing world, with its focus on increasing the labour intensity of government funded infrastructure projects. The assumption at the heart of the EPWP strategy is that increased skill levels translates directly into improved labour market performance. Since the objective of the programme is increased employment, and it is widely acknowledged the country is experiencing a shortage of skilled labour (Kraak, 2005), there is a broad correspondence between the problem and the proposed PWP solution, on the basis of the assumption that

¹¹² This estimate is derived from the EPWP Social Sector Plan which outlines the following potential employments through the ECD programme; 6,500 NQF level 1 and 8,800 learnerships at NQF level 4, plus training of 4,500 Grade R teachers, employment of 9,224 unemployed people in a work place employment and skills programme, 13,776 work opportunities in poor areas with subsidies and employment creation, and 3,000 3-month employment opportunities for unemployed parents, together with ECD support staff such as gardeners, cooks and administrators in 4,000 target schools.

by providing skills to the unskilled they will be able to take up unfilled positions in the economy. Thus it was supposed that as a consequence of PWP participation workers would be transformed from unskilled workers, to workers with skills which conform to unmet demand in the economy. While in the most reductive sense there is some correspondence between the problem and the proposed PWP solution, this analysis is problematic when the nature of the 'skills delivered', and the nature of the 'skills deficit' are compared and the relationship between the two examined in more detail.

The analysis informing the EPWP seems to implicitly assume that there is some form of linear relationship between improved skills and improved labour market performance, with incremental labour market benefits accruing in line with incremental skills acquisition, failing to recognise the size of the skills gap which must be bridged before increased employment opportunities will be accessible by workers. Some insight into this may be offered by the somewhat analogous situation regarding challenges to the Mincerian assumptions regarding log linear returns to education. Recent analysis illustrates the more complex nature of the relationship between education (which may be replaced with skills acquisition in the case of PWP) and improved employment performance, with a certain threshold of education (skills acquisition) being required (in terms of both the level and the nature of skills) before increased employability is experienced (see Keswell and Poswell (2002)). This empirically challenges the conventional Mincerian log linear returns to human capital investment assumption, which also underlies assumption that participation in PWP training, irrespective of its content or duration, will improve labour market performance.

Detailed labour market analysis also suggests that the picture is more subtle than a log linear assumption of returns to investment on an incremental basis would suggest. Unmet labour demand is primarily for labour with intermediate and high skills,¹¹³ and there is no easily identifiable unmet labour demand for unskilled or low skilled (as opposed to unskilled)

¹¹³In South Africa, intermediate skills are defined as those at NQF level 2-5 (equivalent to between Grade 10 and matriculation plus a certificate or diploma). Kraak defines intermediate skills as those which 'follow post-basic education; that is, after the first 9 years of compulsory schooling after which a child is deemed to be basically literate and numerate.' (Kraak, 2005, pers. comm.)

labour (Kraak, 2003). Hence, in order for the EPWP work experience and training to have a significant impact on employment performance, workers would need at least intermediate level skills, for which significant unmet demand exists.¹¹⁴ The construction industry is highlighting the lack of artisans with intermediate level skills, as well as highly skilled personnel such as engineers and contract managers, as critical constraints to their activities¹¹⁵. In order to test whether the training offered through the EPWP is sufficient to bring participants to this skills level, the nature of the training provided under the EPWP is examined in detail below.

In the infrastructure sector, on-the-job training is provided by individual contractors in order to ensure workers are able to perform their allocated tasks (such as basic construction activities), while formal training (two days for every 20 worked) is provided under the auspices of the Department of Labour. Given that the mean duration of employment for most participants in this sector is four months, the average duration of the formal training is only eight days. In the light of this, the critical question becomes, what is the nature of the training offered in those eight days, and what is its value in terms of labour market performance?

For more than 95% of infrastructure sector EPWP participants, the only skills training provided is the on-the-job training required for workers to perform their allotted tasks, and the formal training focuses on 'lifeskills'¹¹⁶ rather than vocational skills, in recognition of the fact that the contact period for training within a short-term episode of PWP employment is not adequate to provide any significant degree of skills transfer.

¹¹⁴ Currently, there are no data on the skills levels of those entering the EPWP, as no baseline socio-economic data on those entering the programme has been gathered. The simplifying assumption is made in this discussion that the programme is targeting the unskilled as intended in programme design.

¹¹⁵ Workers with artisanal skills are not being produced in sufficient quantities in South Africa, and the shortfall is being met through the importation of artisanal skills from overseas. The construction industry argues that both engineering and construction skills are scarce, and that 'specialist construction skills may have to be temporarily imported on selected contracts in the short term' due to the lack of intermediate and high skilled labour available in South Africa (Brunjes, 2003).

¹¹⁶ The term 'lifeskills' is used frequently in the EPWP literature, and in the PWP literature internationally, but does not have a generally agreed meaning or training content (see McCord (2006a) for discussion of this problem with regard to 'lifeskills' training in the Western Cape Province EPWP initiatives).

This critical limitation is recognised within the programme, which argues that:

‘... the nature of the labour intensive construction industry is such that projects, and therefore employment opportunities for labourers typically last only 4 to 6 months. Based on the Code of Good practice for Special Works Programmes, this entitles labourers to only 8 to 12 days of paid training. *This is not sufficient to train unskilled labourers to become artisans.* It has therefore, been agreed with the Department of Labour to create a generic 10 to 14 day training course that will consist of accredited unit standards on: general life skills, awareness of HIV and AIDS, and labour markets and the world of work.’ (Infrastructure Sector Plan for the Expanded Public Works Programme, EPWP, n.d.:8).

This clearly articulates the fact that the amount of training provided during a short-term episode of PWP employment is not sufficient for workers to acquire significant additional technical skills¹¹⁷. The fact that this needs to be cited formally is due to the elevated expectations aroused by the EPWP in the policy discourse, that the training workers will receive while participating in the programme will be sufficient to enable them to take up the unfilled employment opportunities existing in the economy.

In reality, the vast majority of workers will receive only lifeskills training through the EPWP. While these inputs may be of value in terms of certain aspects of their lives, it is not clear that this training will have a significant beneficial impact on labour market performance, particularly given that the main constraint to employment is net lack of demand for low skilled labour¹¹⁸. There is no evidence to suggest that lifeskills training will have a significant impact on labour market performance; this is not a criticism of lifeskills training *per se*, but rather a recognition that the objective of lifeskills training is not to promote labour market attachment. If however, PWP workers were successful in accessing employment after their training, in the absence of an increase in aggregate employment opportunities, this would

¹¹⁷ The skills gained through EPWP participation do not correspond with those demanded in the South African labour market, particularly the unmet need for artisans. This is not unexpected given the traditional five-year duration of the artisanal training or apprenticeship in South Africa and elsewhere.

¹¹⁸ The work of Nattrass indicates that labour market information is important in terms of successful job search (Nattrass, 2000), and hence to the extent that this is included in the lifeskills training, this component may reduce frictional unemployment to the limited extent that it exists in the South African labour market.

represent the substitution of one set of low-skilled workers by another, rather than a net increase in employment. This problem of the displacement of existing workers by PWP substitutes, rather than the creation of real additional employment opportunities, has been found to be a significant issue in several EPWP projects (see, for example, McCord (2006a) with reference to the EPWP in the Western Cape Province)¹¹⁹.

EPWP graduates perceived lack of jobs, funds for job search and skills as the major constraints to improved labour market performance, even after having acquired PWP experience and training (see, for example, McCord (2004a); Ndoto and Macun (2005)). In the light of this it is not clear that the training will contribute to the goal of increasing workers' 'capacity to earn an income once they leave the programme', as anticipated by the South African President.¹²⁰ Hence, it is unlikely that skills development operates as a significant vector of social protection impact in this type of short-term, type A, PWP. However, the other sectors in which the EPWP operates offer insights into the potential for PWP to confer benefits through skills development.

7.8 EPWP Skills Development Outside the Infrastructure Sector

The environment and social components of the EPWP offer insights into the potential, as well as the limitations, of PWP-based skills development initiatives.¹²¹

The environment component¹²² aims to provide skills development during short-term episodes of PWP employment, type A, similarly to the infrastructure sector, although in some cases work is offered on a longer term, although not necessarily regular, basis, with some workers being offered multiple short-term episodes of employment when work is

¹¹⁹ Also M. Mondlane, pers. comm., with reference to the Gundo Lashu programme in Limpopo.

¹²⁰ President Thabo Mbeki of South Africa, quoted in *This Day*, 2003, Mbeki promises a million new jobs. 12 November.

¹²¹ The fourth sector of the EPWP, the economic sector, offers limited new insights into the skills development vector of PWPs, being primarily an SMME development initiative, and will not be discussed further in this thesis.

¹²² The environment sector comprises the Departments of Environmental Affairs and Tourism (DEAT), Water Affairs and Forestry (DWAF), Arts and Culture, and Agriculture

available in a certain area and sector (Ndoto and Macun, 2005). While the formal accredited training component is as limited as in the infrastructure sector, the skills development component in this sector is more focused on the transfer of specific skills (use of chain saws, tree surgery, removal of alien invasive species, etc.) and the intended exit strategy is for workers to 'graduate', being placed in permanent market based jobs in forestry, commercial fisheries, tourism and horticulture utilising the specialised skills gained during PWP participation (EPWP, 2005a). However, the anticipated market demand for such skills has not been realised in most cases, and lack of employment opportunities for exiting EPWP workers in this sector has led to the suspension of exit processes in a number of major EPWP initiatives,¹²³ with workers being retained in the programme, or re-employed over a number of years, in the recognition of the limited market demand for workers with the skills acquired through EPWP participation (Ndoto and Macun, 2005; CASE, 2007).¹²⁴

The social sector represents a different type of PWP, more closely akin to a form of Government Employment Programme (GEP or type B programme).¹²⁵ Within this sector, employment is offered on a medium term basis, up to the statutory EPWP maximum of two years, and a larger percentage of participants receive formal accredited training (25%), which is intended to develop intermediate and high level skills and qualify them for employment in the areas of either Home-Based Care (HBC) or Early Childhood Care and Development (ECCD). In this way the programme has the potential to confer both transfer and stabilisation benefits, and also skills development benefits which can translate into enhanced

¹²³ This has occurred in both the Working for Water programme (established prior to the initiation of the EPWP in 1995 to clear alien invasive species, and subsequently incorporated into the EPWP as the main component of the environment sector) and the Working for Wetlands programme (established as a subset of Working for Water in 2000). (Marais, 2003, pers. comm, and Ndoto and Macun, 2005.)

¹²⁴ It would be possible to stimulate demand in this sector legislatively, for example, by legally requiring and subsequently enforcing the removal of alien invasive species under certain circumstances, but such a situation does not currently obtain in South Africa.

¹²⁵ The social sector is comprised of the Departments of Social Development, Health and Education and the social component of the EPWP has two components, Home Community Based Care (HCBC), and Early Childhood Development (ECD). Early Childhood Development is the process by which children from birth to nine years are nurtured to grow and thrive physically, mentally, emotionally, spiritually, morally and socially. The focus on EPWP is from birth to six years. (EPWP, 2005)

employment opportunities, and hence social protection benefits can be conferred through two vectors simultaneously. In this context, however, rather than matching skills with existing market demand, the PWP matches skills with latent demand for ECCD and HBC provision, which requires government funding for its realisation, at least initially. The extent to which Saye's law will operate in this context, with supply stimulating demand for ECCD and HBC services, is not known, and will be contingent on the affordability of the services provided. In the light of this, it is not known whether market demand will come to replace state funding for these posts over time, and it is likely that mass demand for these workers will, to some significant extent, be dependent on ongoing government expenditure. So the PWP represents an extension of government service provision, and the creation of additional aggregate employment in this sector is primarily contingent on increased government expenditure. Similar schemes have been carried out in countries such as Malawi and Zimbabwe, where latent demand for increased social service provision, particularly in relation to HBC responding to the HIV/AIDS pandemic, was funded using donor rather than government resources (McCord, 2005). These schemes are not typically labelled as PWPs, although they share many of the characteristics of the EPWP social sector programmes.

The insight here is that increases in aggregate employment resulting from skills transfers in the social sector are not inherently or necessarily market driven, but are likely to be contingent on external (to the market) resource flows. Hence, the provision of skills may only translate into increased employment if additional resources are available to fund an extension of service provision. This issue is explicitly recognised in the EPWP Social Protection Plan:

'The key challenge here is to translate work opportunities into long-term livelihoods. The premise of the programme is that skilling on the job will assist workers to find more permanent employment. Whilst every effort has been made to carefully consider exit opportunities, *few of these are available in the private sector* and therefore, it is highly likely that the primary financial burden will remain with government.' (EPWP, 2004a)

Two additional factors mediating the extent to which market based demand for these

services may occur are i) the quality of the training provided, which in is in part contingent on the availability of appropriately qualified trainers, and ii) the availability of both institutional and management capacity to ensure an adequate quality of service provision through the programme. Both of these concerns are particularly acute in the context of a PWP, which is contingent on the rapid and mass expansion of service delivery in these, as in the case of the EPWP.¹²⁶

7.9 Conclusion: EPWP and Training Provision

Having reviewed the skills development component of the EPWP in the context of the South African labour market, it seems unlikely that it will translate into improved labour market performance for participants, as was explicitly anticipated by programme managers:

‘EPWP is not a solution for poverty in South Africa; the main aim is to create job opportunities and *improve the level of education and training*.’ (Sean Phillips, Head of the EPWP, cited in *BuaNews*, March 10, 2005, emphasis added)

However, as argued above, the formal training offered to the majority of workers is not skills-oriented and the on-the-job training tends to be low skilled. At best the ‘training and work experience’ provided through the EPWP may lead to labour substitution rather than increased employment, as a consequence of the lack of demand for low and unskilled labour.¹²⁷ No skills shortage has been identified for the genre of low-level skills acquired by most workers through participation in the EPWP,¹²⁸ and given the high skills growth strategy adopted by the government, it is unlikely that demand for low and unskilled labour with the skills and experience acquired through participation in the EPWP will increase significantly in the short or medium term.

¹²⁶ See footnote 90.

¹²⁷ However, such a benefit would only be palpable from an individual perspective, and has an associated cost from the perspective of workers outside the EPWP.

¹²⁸ With the notable exception of those participating in the social sector of the programme, with its innovative promotion of para-social worker skills.

7.10 Empirical Perspectives on PWP Skills Development

EPWP research findings corroborate the arguments set out above. The work of Ndoto and Macun (2005) which draws on quantitative and qualitative survey work on three EPWP projects in the Eastern Cape, Limpopo and Gauteng carried out in 2004, offers perceptions of the training offered in the environment sector of the EPWP from the perspective of participants¹²⁹. Based on this research, Ndoto and Macun argue that ‘It would appear that the programme’s intervention has not made significant difference with regards to skills provision’ (*ibid.* 31). They concluded that:

‘the programme improved people’s livelihoods, in terms of income [during the period of employment], and removed some constraints to accessing education and improved nutrition. [...] *The situation was however different with regard to skills. We found that although the programme provides some technical (e.g., construction skills) and life skills (e.g., First Aid, Health and Safety, etc.), they did not feel outright that these skills were likely to improve their employment prospects.*’ (Ndoto and Macun, 2005: 32, emphasis added)

Given the importance of perception and confidence in labour market performance, Ndoto and Macun conclude that:

‘The beneficiaries’ failure to acknowledge the skills [training provided during participation in the EPWP] would seem to suggest that more work needs to be done along the lines of ensuring that the beneficiaries recognise the training they are provided with if the programme’s impact is to be sustainable. Failure to do so would render the training provided to the workers worthless and taken for granted’ (*ibid.*33)

It was argued above that in the absence of unmet demand for workers emerging from PWPs with low skills levels, most workers, upon emerging from PWP employment, are likely to return to their labour market *status quo ante*. This situation was presented by a worker from Bushbuckridge currently employed in the *Working for Wetlands* programme, cited in Ndoto and Macun:

‘[Working for] Wetlands is boosting us, so if this contract gets terminated, it means that we are going to have to go back where we were ... because there will not be any income.’ (*ibid.*35)

¹²⁹ The research examined projects within the Working for Wetlands programme which forms one component of the Environment sector of the EPWP.

This suggests that the primary vector of PWP impact is the wage, in the form of the transfer benefit, rather than enhanced 'employability' resulting from PWP skills development. Workers anticipated that upon exiting the programme, they would return to a reliance on a combination of horizontal social support (parents and family) and engagement in the secondary segment the economy for their survival:

'I'll sell some sweets' and 'I'll open a small market at home, sweets, bread and fish...
I'll sell these things, life goes on' (*ibid*:35)

Rather than moving up the hierarchy of the labour market from survivalist micro-enterprise to more profitable self employment or employment, once they have their 'foot on the employment ladder' as anticipated in the programme rhetoric (see, for example, South Africa, Department of Public Works, 2004), indications from the *Working for Wetlands* research suggests that in fact workers return to the same labour market 'rung' from whence they came into the programme.

7.11 Implications for Skills Development in Type D Interventions

Notwithstanding the negative conclusions regarding the likely performance of the EPWP, the programme offers some key insights into skills development which are generalisable across PWPs, in part resulting from the fact that the different sectors of the EPWP offer varying forms of skills development resulting in divergent likelihoods of this having a positive effect on future employment. Hence, skills development as a vector of social protection is contingent on the type of PWP, and not just the nature of the labour market context. The key insights which may be derived from the EPWP experience are set out below, although it is important to note that due to the lack of quantitative evidence on the employment impacts of skills development and work experience post-PWP participation generally, for example through tracer studies, much of the discussion is based on qualitative insights and theoretical arguments.

The EPWP illustrates the difficulty of attempting to provide formal skills development in PWPs unless the period of employment is sufficiently extended to allow for adequate training contact time. This is a key constraint in programmes offering short-term PWP

employment episodes, which is particularly acute with PWP employment in the construction sector.

Where skills training is provided in a PWP, it may not correspond, in terms of content or level, with existing market demand for skills. Hence, the effectiveness of skills development as a vector of social protection in PWPs will be influenced by the extent to which the skills provided through the PWP match unmet labour demand in the economy.

The adoption of social service delivery, rather than physical infrastructure delivery as a sphere of PWP operation, offers an opportunity to address both these concerns, offering at the same time more sustained employment, thereby increasing potential training contact time, while also offering an extension of critical services in demand. However, with particular reference to the social sector, demand for additional social sector workers may be latent rather than patent, and may be contingent on either additional recurrent government expenditure or external funding in order to be realised.

Whatever the type of PWP or sector of PWP operation, the feasibility of the mass delivery of skills training is a critical consideration. This was a key constraint the case in the EPWP, where demand for both lifeskills and social sector training significantly outstripped the capacity of existing accredited service providers to deliver (see McCord (2005)).¹³⁰ In this case, on-the-job training by employers may be the only viable option for skills transfer, but here there are no incentives for the skills transferred to extend beyond the specific skills required for completion of allocated tasks. It was recognised in the initial stages of implementation that 'efficient, to scale and quality training' was core to the success of the EPWP (EPWP, 2004a), and the consequences of failing to achieve this were clearly articulated: 'Should this not be realised, the projections of what can be achieved through this

¹³⁰ The capacity concern is not exclusively limited to the training component of PWPs, but applies equally to all aspects of programme management and implementation which typically have serious workload implications at both central level in terms of programme development, and also at provincial and district level in terms of implementation, spheres where overload and lack capacity are frequently problematic, as in the South African context (see, for example, McCord (2005)). These capacity constraints have negative implications for PWP implementation.

programme will be significantly affected' (*ibid*). This raises a further question regarding PWP as a vehicle for skills transfer; whether skills development should be associated with PWP interventions, or in some cases, given the inherent time limitations in certain types of PWP (notably types A, C and D), which offer limited training contact periods¹³¹, whether it might be more effective to address skills development for the unemployed through a separate institutional instrument (Karuri *et al.*, 2007). If the constraints of operating within the institutional framework of a PWP compromise the effectiveness of training delivery,¹³² it is not apparent that it is useful to maintain the link between PWP and skills development.

Finally, as in many PWP, the skills development offered in the EPWP is not sensitive to the heterogeneity of the unemployed, and the profoundly different labour market options available to different segments of the labour force. A crude distinction was drawn by Borat (2001) between the young mobile unemployed, and older rural unemployed workers with limited education and mobility, whom he characterised as 'unemployable' in terms of existing demand in the formal sector, and for whom formal skills training was not an appropriate policy response. Lee and Woolard (2002) took the analysis further, developing a typology of the unemployed, based on education, age, gender, work experience and urban/rural location. The implication of this analysis that it is critical to recognise the heterogeneity of the unemployed labour force, the source of PWP participants, and to reflect this diversity in the skills development options included in a PWP.

7.12 Skills Development in the Informal Sector and Self-Employment

Martin and Grubb's multi-country study supports the argument that PWP tend not to achieve much success internationally in terms of promoting aggregate formal sector employment (Martin and Grubb, 2001). Given the lack of unmet demand for low-skilled labour in much of sub-Saharan Africa, even if PWP were successful in terms of increasing

¹³¹ Total training contact time was limited to an average of eight days in the infrastructure component of the EPWP.

¹³² Evidence of the failings of skills development in the EPWP is set out in McCord (2004a, 2005, 2006a) and Karuri *et al.*, (2007).

the employment of graduating participants, through marginal skills improvements or access to labour market information, this employment would be largely at the expense of other workers, leading to the substitution of one segment of low-skilled or unskilled labour by another, with a zero net social or labour market benefit. This finding would hold true in most situations of elevated low-skills unemployment, where a PWP did not result in an aggregate increase in employment. If, however, a PWP were able to offer skills which led to the creation of additional informal sector employment and self employment opportunities, rather than aspiring to promote formal employment in sectors where demand is seriously constrained, then the potential aggregate and social protection benefits could be significantly greater. Skills development leading to increased or more productive participation in the informal segment of the labour market could also represent a benefit for those exiting from PWPs. This is particularly important if the limited demand for low and unskilled labour throughout developing and middle-income countries is taken into consideration.

PWP skills training has the potential to promote the expansion of self-employment through both survivalist and small-scale enterprises, as well as increases in domestic production, all of which would all confer social protection benefits to PWP participants. Examples of such approaches are to be found in a variety of PWPs, primarily type B programmes, offering sustained periods of employment and, therefore, greater potential contact time for training and development activities. Examples are the Productive Safety Nets Programme (PSNP) in Ethiopia, which includes a complementary programme offering agricultural training to promote subsistence agriculture (McCord, 2005), while the Improving Livelihoods Through Public Works Programme (ILTPWP) in Malawi, with its entrepreneurial training component and extended duration,¹³³ also attempted to stimulate micro-enterprise activity among programme participants (UK DFID, 2003a). Both programmes were designed explicitly to include skills development components in recognition of the limitations of the wage component of PWPs, as discussed in chapter four. The PSNP includes a complementary agricultural extension component designed to promote subsistence agricultural production

¹³³ Although a type A programme, the ILTPWP, administered by CARE International, extended the duration of programme employment in order to increase contact time for livelihoods training activities.

during the five-year PWP contact period, in order to promote sustained social protection benefits after the period of PSNP participation and PWP employment, while the ILTPWP was designed to facilitate micro-enterprise activity among the poorest during an extended period of PWP employment. The PSNP, however, has been undermined by the inability of the state to roll out agricultural extension services on the scale required by a mass GES (with over 5 million participants per annum),¹³⁴ and although ILTPWP offered a more extended period of PWP employment than typical in infrastructure programmes, it was still found to provide inadequate contact time and support to ensure sustained impacts (UK DFID, 2005).

Notwithstanding the limitations of the PSNP and ILTPWP, approaches offering skills development focused on enhancing livelihoods and informal economic activity have the potential to be responsive to the needs of segments of the unemployed labour force, for whom skills development aimed at employment in the formal sector may not be relevant. Such initiatives may be particularly appropriate for less mobile workers, unable, for reasons of age, infirmity or domestic responsibility, to migrate in search of work; those whom Bhorat has described as 'unemployable' (Bhorat, 2001:40)¹³⁵. However, the viability of this approach is again contingent on both the quality of inputs, and critically, the duration of training contact time which can be accommodated within the PWP.

The impact of such trainings is in part contingent on the potential of participants to accumulate the productive assets required to engage in such activity. PWPs offering primarily short-term employment do not enable participants to accumulate sufficient resources to enter or expand survivalist activities, or to move up the value chain, from local level production and sale of natural products (e.g. firewood, clay or reed products) to the production and marketing of goods requiring capital for material purchase, or for transportation to more distant markets where greater profits may be realisable. For these

¹³⁴ Devereux, 2007, pers. comm.

¹³⁵ Bhorat describes as 'unemployable' the group comprising older unemployed individuals with very little formal education residing in deep rural areas, who are 'never going to find sustainable, long-term employment in their life times' by virtue of their lack of skills and the remoteness of their rural location in relation to labour demand. (2001: 40)

reasons, short-term PWP employment (types A, C or D) is unlikely to stimulate significant sustained increases in survivalist or micro-enterprise activities, whether this is the explicit objective of the programme or not. Strategies for addressing this might focus on coordination with other development initiatives such as savings or microcredit and the provision of materials or other physical assets to stimulate production and marketing.¹³⁶

7.13 Conclusion

The rationale for implementation of the EPWP, and other PWP with type D components, is predicated on the assumption that supply-side interventions can have a significant impact on poverty and unemployment among the low skilled. This rationale is problematic in contexts where the training is limited and of poor quality, and the fundamental problem is the constrained demand for low skilled workers. There is little evidence to support the aspiration that 'participants in the EPWP are able to translate the experience and either enabled to set up their own business/service or become employed' (EPWP, 2004a) and to date, the limited evidence available suggests that as with many PWP internationally, programme graduates are likely instead to return to the pool of the unemployed, from whence they came.

There are two key problems with the type of PWP which attempts to promote employability in the context of structural unemployment. The first is that this approach can only be effective in contexts of frictional unemployment, where adequate numbers of unfilled jobs are available, for which workers can be skilled through work placements and training. Unless sufficient jobs exist, waiting to be filled, *and* the training provided is explicitly linked to the prevailing skills shortages, the programme is unlikely to have an impact on aggregate employment and is likely to result, at best, in substitution of PWP workers for others.

The second problem is that even in OECD countries experiencing low levels of unemployment which is primarily frictional, skills training through work placements has a poor record, with experience across the OECD summarised as follows:

¹³⁶ See, for example, the Jua Kali programme in Kenya, focused on addressing practical constraints to increased informal sector activity (for an overview of this programme, see Ng'ethe and Ndua (1992)).

‘The vast bulk of studies converge in terms of a conclusion on outcomes; this measure [an episode of PWP employment] has been of little success in helping unemployed people get permanent jobs in the open labour market’ (Martin and Grubb, 2001)¹³⁷

In countries where unemployment is primarily structural rather than frictional, a situation prevalent in much of the developing world, the number of low-skilled unemployed tends to far exceed the number of jobs which remain unfilled due to skills shortages. In such contexts, the ability of PWPs effectively to provide meaningful skills development is limited by constraints internal to the PWP model (primarily the short duration of most PWPs (types A, C and D) which limits the extent of skills transfer), and also by constrained demand. In this context, the critical question is whether the training and work experience gained through PWP participation provides the skills in demand in the economy. Crucially, the likelihood of success is determined by the duration of PWP employment, which dictates maximum potential contact time, the quality and relevance of the training provided, the extent of unmet demand in the market (patent or latent), and the availability of funds, either donor or government, to cover the cost of employment in areas where market demand is inadequately developed.

Ultimately, the success of such initiatives is linked to the extent of unmet demand in the economy, and whether PWPs can provide training at an adequate level to enable those exiting the programme to take up the jobs which are available. Outside these constraints the main option is to stimulate self-employment, but this is also contingent on adequate contact time, and the availability of complementary resources and support services, offering for example, savings opportunities, start-up capital and appropriate training.

More fundamentally, while PWPs offer a potential mechanism for the state to access the unemployed and incorporate them into skills training policies, the benefit of providing skills development through the medium or short-term PWPs is not always clear, since operating through the limitations of the PWP institutional structure, timeframe and scale of operation

¹³⁷ See also the similar critique advanced by Bassi and Ashenfelter (1985).

may constrain effective skills development programming, and result in limiting, rather than extending access to training programmes on the part of the unemployed (as illustrated in the case of the EPWP, Karuri *et al.* (2007)). The result of a forced union between PWP and active labour market policies to promote skills development may be problematic, and many PWP 'exit strategies' such as those of the EPWP may be unrealistically optimistic, with the outlook for PWP graduates remaining bleak in most contexts. For these reasons it is not clear that skills development represents a significant vector for the transmission of social protection benefits, particularly when type A or C programmes are implemented in contexts of structural unemployment.

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8 CASE STUDY OVERVIEW: CONTEXT AND METHODOLOGY

Having critically reviewed the key concepts within the PWP discourse, created a PWP typology and schema of objectives, and examined the main vectors of potential social protection transmission, this thesis now explores these issues in detail from an empirical perspective, drawing on original survey data and focus group research carried out in South Africa in 2003 and 2004. The survey presented and analysed in this chapter and the three which follow was conceived, designed and executed in order to respond to the many questions raised by the existing literature and the data and analytical lacunae highlighted in the preceding chapters, with the objective of contributing to the establishment of a more robust and critical engagement with PWPs in general, and PWP evaluation in particular within the future discourse.

This chapter and the three which follow provide an empirical study of the contribution of PWPs to social protection in South Africa, drawing evidence from two case studies, the type A Gundo Lashu programme in Limpopo, and the type B Zibambele programme in KwaZulu-Natal. It attempts to provide some initial responses to the two central questions identified above; PWP incidence and impact, with reference to the typology and vectors of impact outlined above. These chapters are intended as a contribution to the development of the national and international evidence base, drawing on two case studies to explore the core issues of i) incidence, in terms of which segment of the population is participating in PWPs¹³⁸ and ii) impact, in terms of whether PWPs are having a significant impact on social protection through significant temporary or sustained poverty reduction and employment outcomes, mediated through the three vectors outlined above. By analysing their microeconomic and labour market impacts, this study contributes to the evidence base informing the international policy debate, and identifies the key policy lessons arising. The study is presented over four chapters, with chapter eight providing contextual details of the South African social protection and labour market context, an overview of the two

¹³⁸ Little detailed baseline socio-economic data have been gathered on participants in PWPs in South Africa, and so information regarding the characteristics of programme beneficiaries is scarce.

programmes under examination, and details of the survey and analytical methodology adopted. Chapter nine presents a discussion of the key findings on incidence, and chapter ten explores the labour market characteristics of PWP participants and the impact of programme participation on labour market performance. Chapter eleven outlines the key conclusions on impact overall, drawing together the policy implications of the findings.

This study focuses in particular on the demographic and socio-economic characteristics of PWP participants, as in many PWPs no baseline data on participants were collected (Ravallion, 2003). Therefore, it is not possible to ascertain *a priori* who the beneficiaries of the programmes are; a situation which fundamentally challenges any attempt to assess the social protection impact of such an intervention, or to assess incidence. The research interrogates the assumption that the 'less eligibility criteria' (the work requirement and low wages) will lead to participation of the poorest, attempting first to ascertain who the participants in the programmes are, and then to assess whether significant social protection benefits accrue to these participants.

The study draws on two contemporaneous PWPs, both implemented under the aegis of the EPWP, implemented in discrete areas of South Africa with similar poverty and unemployment profiles, one of which conforms to a type A PWP and the other type B, with significantly different design components, conforming to the different PWP types. This offers the opportunity to explore the consequences of different design modalities on outcome, and provides insights into how programme design can affect social protection impact and incidence.

The findings are put in context in this chapter with a brief overview of poverty and unemployment, and an outline of the social protection policy framework in South Africa. Next, an overview of the two programmes is presented, together with a detailed discussion of the survey methodology and analytical approach adopted, and an outline of the structure of the research findings presented.

8.1 The Unemployment and Social Protection Context

After rising for 30 years, unemployment reached a plateau in the mid 2000s, standing at 23% in September 2007 by the narrow definition, and 36% by the broad (StatsSA, 2008a).¹³⁹ At the time of the PWP Survey in 2003 the unemployment rates were 31% and 42% respectively (StatsSA, 2004). Unemployment is disproportionately concentrated in the black population. Structural changes in the economy, arising from shifts in labour intensity and declining primary sector activity, are having a significant impact on both total employment rates and the composition of labour demand, leading to slow employment growth and rising unemployment among the low and unskilled during the 1990s and early 2000s (McCord and Borat, 2003) a situation described by Kingdon and Knight in 2000 as ‘catastrophic’ (2000: 13)¹⁴⁰. Since the mid 2000s, levels of demand for unskilled labour have been sufficient to absorb additional workers entering the labour force, but have only been able to make a limited impact on reducing the massive stock of the unemployed within this group (Meth, 2008b). Economic growth rates are insufficient to absorb the current pool of unemployed labour, and given the current South African growth trajectory, it has been estimated even with optimistic growth projections of 6% per annum that broad unemployment among the semi-skilled and unskilled is unlikely to fall significantly below 30% in the medium term (Lewis, 2001:55).

Out of a total population of 45 million, it can be estimated using the 2005/6 Income and Expenditure Survey (IES) (Stats SA, 2008b:31) that 19 million live below a per capita poverty line of R430 a month, based on Hoogeveen and Ozler’s 2005 poverty line inflated to 2005 values (Hoogeveen and Ozler, 2005), with 3.3 million people living in the bottom decile (mean per capita income of R128), and a further 3.9 million in the next decile (mean income of R242). Estimates of the number of people living below the poverty line vary significantly,

¹³⁹ The official or narrow rate of unemployment is calculated by Statistics South Africa (Stats SA, 2002) on the basis of those unemployed who a) did not work during the seven days prior to the interview, b) want to work and are available to start work within a week of the interview, and c) have taken active steps to look for work or to start some form of self-employment in the four weeks prior to the interview, while the broad or expanded unemployment rate excludes criterion c).

¹⁴⁰ However, recent research in South Africa indicates that self-employment, subsistence agriculture and casual employment may not always be considered as ‘work’ (see, for example, Adato et al. (2004)). This may lead to a bias in survey based estimates of unemployment.

depending on the specification of the poverty line selected¹⁴¹. However defined, it is clear that poverty is a severe problem in South Africa.

Poverty levels are closely correlated with unemployment in South Africa (Leibbrandt and Woolard, 2001). At the time of the PWP Survey, the poorest experienced unemployment rates of more than 70% (Samson *et al.*, 2003) and the majority of households in the bottom four income deciles had no members in employment, leading to the conclusion that most poor households are poor because of the absence of wage income (Nattrass and Seekings, 2001). These findings are supported by research which indicates that job creation is the priority demand households are making on the state, in terms of improving welfare levels (Klasen, 1997; Clark, 2000). Given the strong correlation between wage income and poverty, responding to unemployment is clearly a key policy challenge, and some form of state response to the issue of the working age poor unemployed is required, since the market is unlikely to address this group's needs by offering employment in the medium term.

While South Africa provides an extensive social assistance programme for various categories of the vulnerable, providing grants to more than 12 million recipients, no social grants are available for the working age unemployed poor. Rather than addressing the needs of this group directly through large-scale social protection interventions, the policy strategy is to promote GDP growth, on the assumption that this will provide additional employment opportunities in the medium to long term, and in this way the working age poor will be supported. The only significant social protection intervention accessible for the working age unemployed poor in the short term, pending the success or otherwise of the national growth strategy, is the national PWP (the Expanded Public Works Programme or EPWP, discussed at length in chapter seven) which aims to provide between 100,000 and 200,000 short-term jobs each year, with the triple objective of providing wage income, skills development and creating infrastructure. Given the limited number of short-term employment opportunities to be offered, in the context of 2 to 4 million unemployed, it is crucial to examine which

¹⁴¹ There is no nationally agreed poverty datum line in South Africa, and consequently the extent of poverty in South Africa, and shifts in poverty over time, remain contentious, and are highly sensitive to the poverty line selected, and also assumptions relating to under-reporting of income, the estimation of the child cost ratio, and household economies of scale. For a full exploration of this debate and its implications, see Meth (2004a).

groups are likely to benefit from participation in such a programme, and the nature of the benefits accruing to them. Hence, the two PWP which formed models for the development of the national EPWP are examined in this study in order to assess the efficacy of such a programme in terms of its social protection impact.

8.2 PWP Survey Methodology

The empirical component of this study is based on quantitative and qualitative research carried out with current and former PWP employees and members of their households between June and September 2003, in rural areas of Limpopo and KwaZulu-Natal which share similar unemployment and poverty profiles. The quantitative research was based on a survey which was conducted on participants in two different PWPs, Gundo Lashu in Limpopo and Zibambele in KwaZulu-Natal, both of which won national awards for innovation and were used as models in the development of the national EPWP.¹⁴² The two PWPs differ significantly in their design and implementation modalities, and conform to different PWP 'types' identified in chapter two, with the KwaZulu-Natal programme offering ongoing part-time employment (type B), and the Limpopo programme offering a single short episode of full-time employment, consistent with type A, C and D programmes. The simultaneous implementation of these different PWP types, offered an excellent opportunity to examine and compare these different PWP approaches in similar contexts.

For the quantitative component of the research a household survey was administered, and this was complemented by pre- and post-survey qualitative work, based on semi-structured focus group discussions. The research was designed and managed by the author and implemented in the Limpopo province by two local social development agencies; Khanyisa Integrated Development and Social Research and African Renaissance Development Consultants in collaboration with the Roads Agency Limpopo. In KwaZulu-Natal the research was implemented by staff of the Maurice Webb Race Relations Unit of the University of KwaZulu-Natal with the support of CORD, and in collaboration with the KwaZulu-Natal Department of Transport.

¹⁴² In both provinces the research was carried out in partnership with provincial authorities, the Roads Agency Limpopo and the KwaZulu-Natal Department of Transport.

The survey was designed to explore the demographic, labour market and socio-economic identities of participants in the two programmes in order to gain insights into the issues of incidence and also the impact of programme participation on participants, using a range of poverty indicators. The questionnaire was developed in a format compatible with the Labour Force Survey (LFS)¹⁴³ in order to facilitate the use of LFS data for rural Limpopo and KwaZulu-Natal for comparative purposes. Also included were elements designed to yield the information necessary to promote insights into the potential social protection function of different types of PWP in order to inform policy and programme development. The survey was comprised of fourteen modules;

- Household Composition
- Health
- Employment and wage income
- Transfers, state and private
- Agriculture
- Remittances
- Financial assets
- Material assets
- Credit
- Changes in household circumstances
- Impact of additional income
- Secondary programme impacts, (this module explored workers' perceptions of the impact of i) the physical assets created under the programme and ii) the work experience gained through participation, on their livelihoods
- Nutrition, and
- Education

The survey was field-tested and revised after focus group work with a sample of the respondents.

Summary details of the sampling process are given in Table 8.1, and the approach is discussed in more detail below.

¹⁴³ A national survey focused on employment, implemented twice yearly by Statistics South Africa.

Table 8.1: Summary of Sampling Information

	Zibambele	Gundo Lashu
Total number of programme participants*	13,865	1,700
Number of sample households	413	348
Sample fraction	3.0	20.5
Traced households	413	268
Percentage of sample households traced	100%	77%
Observed sample fraction	3.0	15.8
Number of interviews conducted	413	268
Standard error with 95% confidence interval	5.4%	4.8%
Gender of interviewed workers:		
Female	93%	48%
Male	7%	52%

* For the Zibambele programme this figure represents the total number of current PWP employees, as in this programme employment is sustained once workers have enrolled, rather than being limited to a single employment episode after which workers exit. For the Gundo Lashu programme however, this figure indicates the total number of workers who are either currently employed, or have previously been employed in the programme, since data disaggregating these two groups was not available at the time of sample frame creation.

The sample was selected from a sample frame including all employees recorded in both programmes, and the survey was administered to a total of 676 households (containing 4,792 individuals), on the basis of a one-stage random selection process in Limpopo, and a two-stage random selection process in KwaZulu-Natal. The KwaZulu-Natal sample was drawn from throughout the province in areas where the programme was operational, while the Limpopo sample was drawn from the two clusters within the District of Capricorn (Mankweng and Sekhukhune) where the programme was implemented. In all cases, the PWP workers themselves were the sampling unit, and information was also collected on all members of their households. In the Limpopo survey all workers were interviewed in their homes, but in the KwaZulu-Natal survey this was not always possible because of implementational constraints¹⁴⁴. When the interview took place at home, all household members present were invited to participate, and in all cases respondents were asked to provide information about absent household members.

¹⁴⁴ In some instances where the households were considered by the fieldwork agency to be too remote to access efficiently, Zibambele participants were interviewed at their work stations or invited to travel to more centralised locations for the administration of the survey.

The total Gundo Lashu (Limpopo) PWP worker population numbered 1,700, and the survey sample was based on a one-stage random selection from lists of programme participants. This approach was viable because of the concentration of all the workers in two small and easily accessible clusters within Capricorn District. Of the 348 households in the sample, only 268 were interviewed (77%), because of problems with unknown workers,¹⁴⁵ and of these, 263 surveys were of sufficient quality to be used in the subsequent analysis.¹⁴⁶

The Zibambele (KwaZulu-Natal) PWP worker population numbered 13,865, distributed throughout the province. Due to the large number of workers and their dispersion, a two-stage sampling methodology was used, with an initial random selection of 15 of the 31 Rural Road Network Transport Fora¹⁴⁷ in the province, and a subsequent randomised cluster selection of roads. A selected number of workers and their households from each of the selected roads were interviewed, with a final sample size of 413 workers/households.¹⁴⁸ The total number of households surveyed was 676, and of these 263 households were from Limpopo and 413 from KwaZulu-Natal. The 263 households from Limpopo included 340 PWP workers, as some Gundo Lashu households had multiple PWP employees. The Limpopo sample included 132 current PWP workers and 208 workers whose PWP employment had been completed at the time of the interview. Of the 263 Gundo Lashu households, 149 (57%) had no current PWP workers at the time of the interview, and 114 had current workers (43%). The 413 Zibambele households included 415 PWP workers, all of whom were employed at the time. Only two households had more than one PWP employee.

After a preliminary analysis of the survey data was performed, using Stata, qualitative approaches were then adopted in order to verify and explore the initial findings, involving a series of semi-structured focus group discussions with PWP participants, eight in each

¹⁴⁵ It is likely that the 23% failure rate is the consequence of a combination of ‘ghost workers’ (fictitious workers for whom wages were falsely claimed by contractors), and the employment of workers who were attracted from outside the area to work on the scheme, who then left the area once their employment was completed – a scenario which is likely since local labour supply was reported not always sufficient to meet the demand.

¹⁴⁶ This sample size resulted in a 95% confidence interval with a standard error of 5.4%.

¹⁴⁷ The Rural Road Transport Forum is the administrative unit into which the KwaZulu-Natal Department of Transport divides the province for the purposes of the PWP.

¹⁴⁸ This sample size resulted in a 95% confidence interval with a standard error of 4.8%.

province, and also a smaller number of focus group discussions with other community members who were not participants, but would have the potential to observe the impact of the programme from a diverse set of external viewpoints, including school teachers, local traders and local government officials. These focus group discussions were led by members of the teams responsible for the implementation of the quantitative survey work in each area who were native speakers of the local languages¹⁴⁹. The discussions were also observed by the author. The insights arising from the focus groups were valuable in interpreting and understanding the data. Further Stata analysis of the data was then carried out in order to extract the descriptive and econometric insights required to answer the key research questions. Data were not weighted in either case, as both samples are assumed to be representative of their population.

8.3 Analytical Methodology

This analysis of incidence and impact is based on descriptive statistics and econometric analysis, using data from the PWP Survey described above, together with data from the March 2003 Labour Force Survey (LFS) and the national Census of 2001, referred to in the text as LFS 2003 and Census 2001 respectively. The research findings presented illustrate the key issues emerging from the survey, and offer insights into the performance of two different types of PWPs in terms of social protection provision.

The analysis falls into three sections; the first addresses the question of incidence, examining the demographic and socio-economic characteristics of the PWP workers and their households, the second explores incidence and impact from a labour market perspective by focusing on the labour market characteristics of PWP workers, their households, and the wider community, and the third examines various dimensions of programme impact.

8.4 Incidence

The study first examines the characteristics of the PWP workers and their households, in order to determine which segment of the population is participating in PWPs and what targeting of PWP employment is taking place. The characteristics of the workers and their

¹⁴⁹ Zulu was the mother tongue of the Zibambebe workers, and Pedi for the Gundo Lashu workers.

households are identified in terms of a number of demographic and socio-economic indicators, and compared with data for the local population in the programme areas derived from both the 2001 Census, and the March 2003 LFS, which are used as comparators.¹⁵⁰ Propensity score matching techniques are then adopted to identify PWP-matched households within the Census 2001 and these are then compared to non-matched households in these areas in order to assess the relative income status of PWP-participating households, and carry out an income-based poverty incidence assessment.

8.5 Labour Market Incidence and Impact

Next, labour market aspects of the two programmes are explored, in terms of incidence and impact, primarily exploring the question at an individual level, in terms of both PWP participants, and members of PWP households. The labour market characteristics of PWP participants and household members are reviewed in detail and compared, making use of within household comparisons to benefit from household fixed effects, while also recognising the complexity of the fact that the behaviour of PWP and non-PWP labour within a household is mutually linked. Initial attempts are made to identify the labour market characteristics of PWP participants, and PWP households, and to explore the relationship between prior labour market position and PWP participation. Next, the impact of programme participation on labour market performance is explored, in terms of whether labour market 'exposure' and training led to improved employment performance, as anticipated in the policy discourse, and whether PWP employment stimulated informal micro-enterprise and local economic activity.

8.6 Impact

The social protection impact of participation in the PWP is then examined in terms of a range of monetary and non-monetary indicators of poverty. Impact is reviewed in terms of the impact of the wage and asset vectors by exploring multiple dimensions of poverty, with particular emphasis on i) income, ii) consumption, iii) ownership of material and financial assets, iv) human capital in terms of nutrition and access to education, v) psychosocial

¹⁵⁰ While the March 2003 LFS represented the closest temporal and design match to the PWP surveys, this data cannot be analysed at a district level, and for this reason the Census 2001 data were also used in the following analysis, see discussion below.

benefits, and vi) participants' own assessments of the medium-term impact of programme participation. The income poverty impact is examined by assessing the values of both the PWP wage transfer and income forgone, and calculating from these the net wage benefit accruing to households from participation. The total household income is then calculated and considered in relation to the poverty line, and Poverty Impact Curves (PICs) derived to illustrate programme impact, following Ravallion (2003). The discussion of consumption explores the primary uses of the PWP wage, in relation to material and financial asset ownership, and the human capital discussion examines changes in investment in nutrition and education as a consequence of participation in the programme. Psychosocial dimensions of programme participation are also briefly reviewed, highlighting the role of PWP income in facilitating the observance of social norms and customs. Finally, a brief discussion of the impact of assets created on participants is offered.

The conclusion pulls these threads together in order to make an overall appraisal of the role of the two PWPs in addressing social protection through each of the three vectors: wage, assets and skills, and the key policy implications arising from the analysis are outlined.

8.7 Data Constraints

In conducting this analysis, a number of data constraints were faced, relating to the lack of comparator or control data in the PWP Survey, as a consequence of the lack of initial baseline data on participants, poor quality income data in the key national surveys used for comparison (LFS 2003, and Census 2001), lack of geographically disaggregated data in the LFS 2003, lack of PWP Survey panel data, confusion regarding the employment status of PWP employees included in the sample, and lack of a nationally agreed poverty line. These issues are discussed below.

Lack of Baseline Data

The lack of baseline data on PWP participants in the two programmes posed a serious methodological constraint. A 'difference-in-difference' (DD) methodology would have been the most appropriate way to evaluate the impact of the programmes, using as a control households with similar pre-programme characteristics to those of the households 'treated' by becoming PWP participants. However, this approach was not feasible due to the fact that the characteristics of PWP participants were not known *a priori*, rendering the inclusion of a

non-treatment control group in the survey impossible; the identification of the characteristics of participants itself formed one of the critical questions which the study set out to examine. In the absence of a control group, the survey was conducted only on households with members who participated in the PWP, the 'treated' group. Comparative analysis was then carried out *post hoc* using data from both the March 2003 LFS and the 2001 Census, once the characteristics of the PWP workers had been identified from the PWP Survey data, on the basis of both direct comparison of the overall population with the PWP sample, and matching techniques.

The PWP Survey was designed to be directly comparable to 2003 Labour Force Survey (LFS),¹⁵¹ implemented biannually by Statistics South Africa (StatsSA). However, there are two key constraints relating to the use of the March 2003 LFS for control data; the limited geographical disaggregation possible with this survey, and the quality of the income data. In terms of the first constraint, it is not possible to disaggregate the March 2003 LFS data to district level, or to specify 'rural' as a condition¹⁵². While the KwaZulu-Natal programme was implemented across the province, and so provincial comparator data are acceptable, analysis at district level is necessary in the case of the Limpopo survey, as the programme was concentrated in a single district, and yet could only be compared to province-wide data if the LFS data were adopted, thereby risking a reduction in the quality and nuance of analysis. Using provincial LFS data would be particularly problematic as Capricorn District, where the programme was implemented, is significantly less poor than other districts in Limpopo, by a range of indicators (such as lower unemployment rates than the provincial mean, and significantly higher incomes,¹⁵³ see discussion in Elsenburg, 2005). In order to avoid the risk of biasing an interpretation of incidence and impact, it is not appropriate to compare survey findings with provincial level data from the LFS. For this reason, where possible, data from the 10% sample of the 2001 Census, disaggregated to district level and limited to rural

¹⁵¹ The March 2003 Labour Force Survey was the seventh round of a twice-yearly household survey implemented by Statistics South Africa. The survey examines the extent of employment in the formal and informal sectors, and the extent of unemployment, gathering data from 69,000 adults aged between 15 and 65 from 30,000 dwellings around the country.

¹⁵² The 2003 LFS adopted an urban/non-urban dichotomy, rather than an explicit identification of 'rural'.

¹⁵³ Mean household income in agricultural households in Capricorn was ZAR 19,345, compared to a provincial norm of ZAR 14,186, and for non-agricultural households ZAR 30,361, compared to ZAR 25,402 (Elsenburg (2005:7) based on the 2000 LFS)

respondents, have been used for comparative purposes. Compared to the provincial means, the Limpopo PWP participants were not poor in relative terms, on the basis of a range of non-income poverty indicators, but it is necessary to compare the PWP respondents with the norm of the district in which the programme was implemented in order to make an assessment of incidence within the programme. In this way, the socio-economic status of the PWP participants can be assessed in relation to the district population overall, which enables a more accurate analysis of incidence.

Limited Income Data

The second major data constraint relating to the 2003 LFS is that the income data are not sufficiently detailed to offer meaningful comparisons with the PWP Survey data. While the LFS provides only limited summative income and social grant receipt data, the Census 2001 income data are also limited, with income data restricted to broad income bands, rendering any matching or incidence analysis based on monetary indicators problematic. In order to carry out an incidence analysis without recourse to income data, a set of non-monetary indicators of poverty have been used for both descriptive and econometric analysis which relate to individual and household material and human capital characteristics (asset ownership, nature of dwelling, gender of household head, educational attainment of household head, educational attainment of household head). In addition to descriptive comparisons of the non-monetary characteristics of the treatment and control groups, a model has been developed based on propensity score matching using a core set of characteristics to ascertain the relative socio-economic status of PWP participants, in order to assess targeting and incidence in relational, if not absolute, income terms.

Geographical Disaggregation

Where Census 2001 has adequate variables it has been used as the comparator of choice, using data aggregated at province level for the Zibambele analysis, as the survey groups were drawn from each of the province's districts, and district level for Gundo Lashu analysis, as the PWP was implemented in Capricorn District alone, with both survey clusters falling within this district. In each case, only rural Census data were used, reflecting the rural focus of the two PWPs. Where the LFS has been used as the comparator, the data have been conditioned on the basis of province and 'non-rural' identity.

Panel Data

The absence of panel data is problematic in terms of an assessment of programme impact over time. In order to address this constraint, recall questions were included in the PWP Survey relating to nutrition, savings, education, asset ownership and perceptions of poverty.

Employment Status of PWP Participants

An unanticipated data constraint emerged during survey implementation, relating to the employment status of PWP participants. Within the Zibambele sample, all households surveyed included current PWP participants, but within the Limpopo sample, baseline participant data were of insufficient quality to differentiate between households with current and former PWP participants. Hence, households with both current and former participants were included in the sample. This in effect created two subgroups within the Limpopo sample, and the analysis had to be carried out in such a way as to ensure that the data from the two groups was kept discrete where the current status of the PWP participant could have an impact on the outcome.

8.8 Poverty Line

While several different poverty lines are in use in South Africa, this chapter makes use of a version of the Household Subsistence Line (HSL) for analytical purposes.¹⁵⁴ The HSL is a measure of the theoretical monthly cost of basic needs derived from a basket of goods and services, comprising food, housing, fuel, light and transport. The figure for 2003 has been derived from the HSL for low-income households calculated by Potgieter (2003) and adjusted in line with revisions to this methodology by Meth (see Meth (2004a)), to arrive at a low-income HSL of R486 (US\$65 at 2004 prices) per adult equivalent.¹⁵⁵

¹⁵⁴ While recognising that the choice of a poverty line offers an inherently subjective definition of poverty, nevertheless the selection of a consumption based HSL offers a useful insight into the material poverty of programme participants.

¹⁵⁵ This figure is derived for urban households, but, given the lack of a rural HSL for South Africa, it will be used as an approximate indicator of rural household poverty.

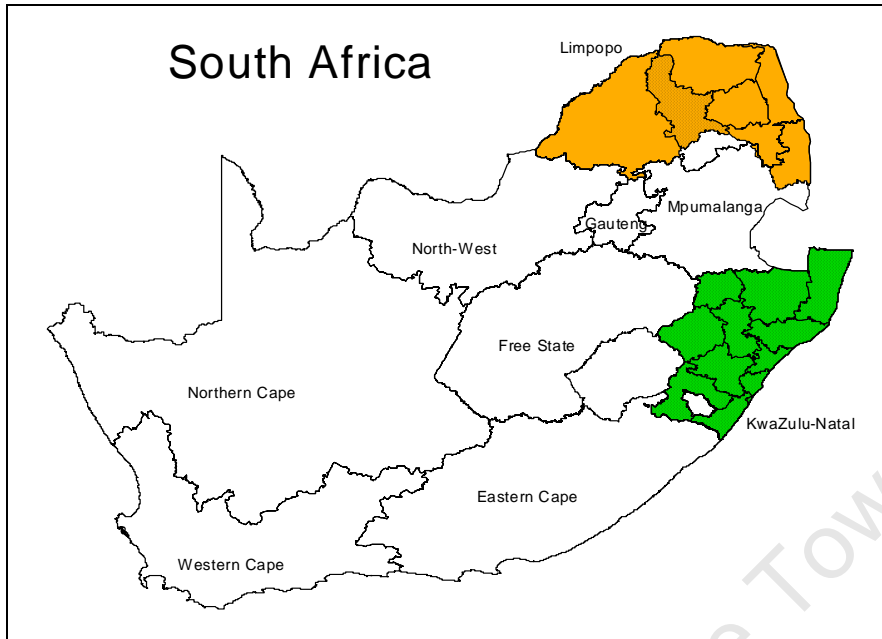
8.9 Overview of the Case-Study Programmes

The two PWP's under review are the Gundo Lashu programme in Limpopo, and the Zibambele programme in KwaZulu-Natal.¹⁵⁶ The programmes were selected because of their high profiles, differing design and implementation modalities, and the use of components of the programmes in the EPWP, with the Limpopo programme being used as a model for the labour-intensive construction component of the national EPWP. The operational areas of the two programmes are illustrated in Figure 8.1. The Gundo Lashu programme was implemented in just one area, Capricorn District (shaded), while the Zibambele programme was implemented throughout the province.

The Characteristics of Limpopo and KwaZulu-Natal

Limpopo has a population of 5.4 million (12% of the total population of South Africa), and KwaZulu-Natal has a population of 9.8 million (21% of the total) (Stats SA, 2004). Limpopo and KwaZulu-Natal are two of the poorest provinces of South Africa, with the highest unemployment rates in the country, at 38% and 36% respectively by the narrow definition, compared with a national figure of 31% (Stats SA, 2003b). In both provinces employment is dominated by elementary occupations, which account for 33% of workers in Limpopo, and 25% in KwaZulu-Natal. Both provinces have traditionally been highly dependent on agricultural employment and remittances from migrant labour, and the structural shifts in the national economy in recent decades have had a major negative impact on both poverty and formal sector employment (Leibbrandt and Woolard, 2001). The historical nature of disadvantage in the two provinces is illustrated by the fact that, among those aged 20 and over, 33% of the Limpopo population and 22% in KwaZulu-Natal have no schooling, compared with the national average of 18% (Stats SA, 2003c).

¹⁵⁶ 'Gundo Lashu' means 'Our victory' in Venda, and 'Zibambele' means 'Doing it for ourselves' in Zulu.

Figure 8.1 PWP Coverage

Note: The dotted areas represent the districts where the two programmes are implemented

Programme Objectives and Modalities

The goal of the Gundo Lashu programme is the 'improvement of livelihoods in rural communities in the Northern Province', and the purpose 'employment creation within the rural communities ... skill transfer from private contractors to community members ... [and] enhancement of livelihoods for those community members providing labour to the programme' (Roads Agency Limpopo, 2003), which may be characterised as sustainable poverty reduction and improved labour market performance. The programme is implemented by the Roads Agency Limpopo,¹⁵⁷ with support from DFID and the ILO, and is focused on both employment creation and the training of contractors and consultants in labour-intensive road rehabilitation. It was initiated in 2000, and had employed a total of 1,700 labourers at the time of the survey.

The programme was implemented through private contractors who directly recruited PWP labour with support from social facilitation agencies which managed the contractors' relations with the communities supplying the labour. The period of employment ranged

¹⁵⁷ The Roads Agency Limpopo is a parastatal with responsibility for the management of all provincial-level roads.

between less than one month and four months, and labour was recruited on the basis of the 'Special Public Works Programme' Code of Conduct, gazetted in 2001, which sets out participation targets (60% women, 20% youth and 2% disabled), prohibits employment exceeding 24 months in duration, and also allows for a derogation from national minimum wage legislation in favour of a locally negotiated wage, in return for training inputs for workers of two days for every 20 worked. In the Gundo Lashu programme, a task rate of R30 (US\$4.05 at 2003 rates)¹⁵⁸ was negotiated, which in most cases translated into a daily wage of R30.¹⁵⁹ Wage payments were made directly to labourers by the contractors in cash, and training inputs were delivered by the Department of Labour.¹⁶⁰ Where PWP employment was oversubscribed, rationing was carried out using a lottery, with ownership of an identity card being the condition for consideration, thereby excluding those without such documentation who tend to be among the poorest. Demand for labour exceeded the locally available supply during the construction of highly labour-absorbing components of the road, and at these times all available labour was employed, compromising any attempt at targeting, in the interests of the exigency of the construction process.

The Zibambele programme in KwaZulu-Natal was also initiated in 2000, with the goal of the 'creation of sustainable job opportunities for poor rural families through the maintenance of rural roads' (South Africa, KwaZulu-Natal Department of Transport, 2002). The objectives of the programme were to:

- 'Maintain the province's rural road network
- Provide destitute rural households which have no other source of income with a regular income
- Put people to work who are unemployable due to their poverty
- Improve the life chances of the contractors and their children (nutrition, education, dignity and economic activities)
- Enable contractors [PWP participants] to organise themselves into credit unions and invest savings in other productive activities

¹⁵⁸ US\$1 was R7.4 in May 2003.

¹⁵⁹ It was possible to earn more than R30 if more than one task was completed in a day.

¹⁶⁰ It should be noted that the training package offered to the Gundo Lashu workers was recognised as not being optimal, and has subsequently been revised.

- Create sustainable work opportunities'

(South Africa, KwaZulu-Natal Department of Transport and Public Works, 2002).

The programme was implemented directly by the Provincial Department of Transport, and provided permanent employment through labour-intensive road maintenance (rather than construction, as in the Gundo Lashu programme) for 14,000 workers on a part-time basis (eight days per month), with a large degree of flexibility regarding when the hours were worked during the month. The programme targeted the poorest members of communities, particularly female household heads, who were selected by community representatives using community institutions developed over several years by the Department of Transport.¹⁶¹ Zibambele employment was oversubscribed and selection was made on the basis of community identification of the poorest with no alternative forms of income or support. Workers were contracted directly by the Department of Transport, and paid at the minimum construction industry wage (R5.57 per hour (US\$0.75 at 2004 prices)) for the 60 hours a month they worked on the basis of twelve-month annually renewable contracts, totalling R334 a month (US\$45). Wage payment was made monthly through electronic transfers to the workers' bank accounts in the nearest town,¹⁶² and training was delivered on an ongoing basis by the Department of Transport and its social development consultants. The Zibambele contract was given to a household rather than to an individual, so that if the primary worker were sick or had passed away, employment in the PWP would shift to another household member.

8.10 Introduction to Analysis

The key findings from the PWP Survey are presented in the following three chapters, with chapter nine exploring the question of socio-economic incidence, chapter ten examining labour market incidence and impact, and chapter eleven attempting to examine the question

¹⁶¹ These institutions are called Rural Road Transport Fora (RRTF), and they are charged with a range of transport-related tasks including the selection of priority roads for maintenance, in addition to the selection of PWP participants.

¹⁶² Many participants without identity cards were helped to procure them by programme staff in order to open bank accounts.

of social protection impact overall, in terms of both monetary impacts and household level outcomes in terms of multiple non-monetary dimensions of poverty.

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9 PROGRAMME INCIDENCE

This chapter explores the critical issue of analysing the identity of the case study PWP participants, in order to establish the incidence of PWP participation, a question which is central to assessing the social protection impact of PWPs. As with many PWPs, no baseline information on the socio-economic characteristics of those included and excluded from the programmes was gathered in either programme. This makes an assessment of incidence problematic, and renders attempts to assess the effectiveness of the programmes as social protection instruments somewhat heroic. In this chapter, this problem is addressed by analysing a number of key demographic and socio-economic indicators drawn from the PWP Survey data in order to locate the participating households within the South African socio-economic distribution, and comparing them to independent census and survey data using both direct comparison and matching techniques.

9.1 Structure of the Chapter

The chapter starts by reviewing the targeting and rationing approaches used to control access to both programmes, as these are likely to be the key determinants of programme incidence. Once the modalities of each programme have been discussed, the chapter then reviews the PWP Survey data in a number of different ways in order to construct an assessment of incidence. The demographic and socio-economic characteristics of the PWP participants in each programme, and the households to which they belong, are extracted from the survey data. These are then compared to provincial and district data on the same variables from the LFS and the 2001 Census. First the demographics of the PWP participants from the two programmes are reviewed in terms of age, gender, location within household structure, education and literacy. These characteristics are compared between the programmes, revealing significantly different characteristics. Next the characteristics of PWP households are reviewed and compared to LFS 2003 and Census 2001 data as appropriate, in order to locate the PWP households within the populations from which they are drawn, first focusing on the characteristics of the household heads, looking at gender and education level, and then examining household characteristics (including household size and asset ownership, which was found to be a good proxy for household income, and social grant receipt). Finally, a propensity score matching (PSM) exercise is carried out, in order to match the survey PWP

households with households in the Census 2001 on the basis of key household variables. The validity of the matching exercise is checked by analysing the basic household characteristics of PWP and matched households, to ensure consistency with the prior analysis, and then the income data for the matched households are used to draw some conclusions on the poverty targeting of both programmes. These findings are then reviewed in the light of programme design factors.

9.2 PWP Access: Targeting and Rationing Practices

In the context of mass unemployment and extremely low informal sector earnings, it is not evident that the principle of 'less eligibility' through the work requirement and low wage will ensure that the 'poorest' will succeed in accessing PWP employment. Hence, the modalities of targeting and rationing become critical determinants of the extent to which such programmes reach intended vulnerable groups. In the case of South Africa, access to PWP employment is strictly rationed, due to the large scale of the unemployment problem, and the relatively limited scale of PWP employment. Full implementation of the national EPWP, of which both case study programmes form a part, would absorb less than 1% of unemployed workdays per annum (McCord, 2003). Since the EPWP is the only significant policy response to the social protection needs of the unemployed working-age poor, it is particularly important to examine the efficacy of different EPWP interventions in reaching the poorest within this group. This is not to suggest that all the poor are not in need of social protection support, but rather that in the context of a highly rationed resource, it is important to know what proportion of the transfer is reaching the poor, and whom among the poor are the beneficiaries, in terms of their relative poverty.

As mentioned in the previous chapter, the two case study programmes adopted different targeting mechanisms and participation criteria, with the type A Gundo Lashu programme in Limpopo adopting conventional PWP targeting practices, based on a restricted wage, while the type B Zibambele programme in KwaZulu-Natal uses community-based targeting together with a higher hourly wage, although given the part time nature of the employment, it should be noted that this results in a lower total monthly wage. These different modalities are instructive and are discussed in detail below.

The Gundo Lashu programme adopted a restricted wage as the primary mechanism to target the poor. The Gundo Lashu wage is set below the minimum wage, on the basis that this would deter all but the poorest from self-selecting into PWP employment, in line with the principle of 'less eligibility'. In contrast, in the Zibambele programme the wage is set at the minimum wage for the rural construction sector. In addition to the wage, the case-study programmes both adopt additional demographic targeting criteria. The Gundo Lashu programme nominally adopted the official EPWP participation targets with quotas for the employment of women (60%), youth aged between 18 and 25 years (20%), and those with disabilities (2%) (South Africa, Department of Labour, 2002b).¹⁶³ It is interesting to note that membership of a broad demographic grouping, rather than poverty, is the criterion for inclusion in the programme. There is no explicit adoption of eligibility criteria based on poverty, as it is implicitly assumed that poverty targeting is sufficiently addressed through the reduced wage level.¹⁶⁴ In the Zibambele programme, in contrast, poverty is explicitly used as the targeting criterion which is implemented by community groups, and within the group identified as the 'poor', the poorest were explicitly targeted, using membership of female-headed households as a secondary criterion to reach the subset of the most disadvantaged. The outcomes of these differing eligibility criteria and targeting methods are empirically tested in the analyses below by comparing the characteristics of the PWP participants and their households with those of the population of their respective catchment areas drawing on the 2001 Census as a comparator, and also by comparing matched samples with the overall population. By comparing the characteristics of participants and locating them in their respective district and provincial contexts in this way, the targeting performance of the PWPs can be assessed as a means to gauge programme incidence, and as a first step towards evaluating the two programmes' social protection performance.

During the implementation of the Gundo Lashu programme, mobile labour from outside the immediate programme area complemented local labour supply at times when local labour supply was insufficient to meet construction demand, with participants being selected on the

¹⁶³ These quotas are articulated in the Basic Conditions of Employment Act 1997.

¹⁶⁴ Everatt suggests that the expectation of positive poverty outcomes from programmes with limited or inconsistent definitions of poverty, and hence a limited poverty focus, may not be uncommon in the South African policy context (2003: 86).

basis of availability, rather than other explicit targeting criteria. The migrant labour which participated in the PWP during periods of peak labour demand was not captured in the survey, which was limited to those domiciled in the intended target area. The fact that 15% of those on the payment roster sample frame were 'not known' in the host communities during the survey process, implies that the extent of migrant labour included in the programme was significant. While the existence of this problem was identified by programme managers during implementation, the extent of the participation of participants from outside the local communities had not been recognised. The inclusion of migrant labour in PWP is *not de facto* problematic. However, the resultant exclusion of those living outside the programme area from the survey does impact adversely on the ability of the survey to adequately assess the characteristics of programme participants, since 15% of participants are excluded from the analysis.

At other points in the construction cycle, when the local labour seeking employment exceeded PWP job availability, job rationing was required, and ownership of an ID card was reported in most cases to be the initial criterion for eligibility¹⁶⁵, with selection subsequently proceeding on the basis of a lottery,¹⁶⁶ with exigency once again overriding the more complex participation criteria set out in the SPWP.¹⁶⁷

Hence, in the Gundo Lashu programme, the degree of participation by particular target groups at any point in the implementation cycle was contingent on the size of the available labour supply in relation to demand, and also on the commitment, interest and time invested in the targeting component of the recruitment process by the contractors. Contractually there were no incentives for the private sector contractors executing the programme to meet either explicit demographic or implicit poverty targets in their recruitment processes. This insight has negative implications for the degree of poverty targeting, and targeting to the poorest likely to occur in such programmes, and this highlights the critical importance of the institutional processes through which targeting takes place, and also the phasing and scale of

¹⁶⁵ Focus group discussions, Capricorn District, May 2003.

¹⁶⁶ This process was reported by focus group participants in both the Gundo Lashu clusters.

¹⁶⁷ At these times of insufficient local labour supply, additional labour was recruited from outside the project areas, pers. comm., May 2003, Mbongeni Mondlane, ILO Social Development Adviser to the Gundo Lashu programme.

labour demand in relation to supply in a given area, if poverty-related targeting of PWP employment is to be achieved. Both these scenarios, excess demand for PWP employment leading to a lottery-based allocation, on the basis of the assumption that the wage level itself will exclude the non-poor; and excess demand for labour outstripping local labour availability, leading to participation of migrant labour in PWPs, are common in type A and C programmes. The implication is that the targeting nuances incorporated into type A or C programme design may be compromised by the exigencies of differential labour demand throughout the construction process.

In the Zibambele (type B) programme, excess demand for PWP jobs led to high levels of competition for employment, and as a result access to employment was strictly rationed. In this case, each applicant was considered on the basis of strict poverty criteria (based on a combination of factors such as household labour availability, wage income and grant income) by community representatives from the RRTF which included representatives of the poor within the community. The extent of community participation in the selection process was feasible due to the long-term relationship between the community and government implementing agencies, as the RRTF institutions adopted for PWP selection were functioning prior to the implementation of the PWP (McCord, 2003). The extent of active governance of the programme by the community resulting from this institutional setting was illustrated by a report given by one focus group that one Zibambele participant had been invited, by the community who had previously selected her for participation, to step down from the Zibambele programme upon receipt of a pension by a household member, on the grounds that she no longer conformed to the poverty selection criterion, since her household now had access to an alternative form of income. This is indicative of the effective community ownership and commitment to the programme's purpose and the objective of selecting the poorest for participation.

This description of the two programmes implies different targeting outcomes. The survey findings are examined below to assess whether they indicate different incidence outcomes resulting from the differing targeting modalities in the two programmes.

9.3 The Characteristics of PWP Participants

The age and gender of PWP participants is set out in Table 9.1.

Table 9.1: Age and Gender of PWP Participants

	Mean Age	Age Range	Aged <25 (%)	Aged >40 (%)	Female (%)
Gundo Lashu (n=340)	35	14-61	22	29	48
Zibambele (n=415)	45	19-63	2	72	93

Source: Own calculations using PWP Survey 2003.

The mean age of the Gundo Lashu participants was 35, with 29% of the participants being above the age of 40. This was significantly higher than the mean age of the Zibambele participants was 45, with 72% being over 40.¹⁶⁸ In terms of the programmes' respective targets, the Gundo Lashu programme met its youth target, with 22% participation by those under 25, compared with a target of 20%. However, the programme failed to meet its female participation target of 60%, with only 48% of the Gundo Lashu workers being female. The Zibambele programme aimed to employ women, and succeeded in this respect, with 93% of the Zibambele sample being female. In this way the demographics of the PWP participants is consistent with the differing age and gender distributions which would be expected, given the programmes' respective targeting objectives and implementation modalities, since the Zibambele programme explicitly focused on reaching poor female-headed households¹⁶⁹, while the Gundo Lashu programme nominally prioritised 'youth' as a target group and in practice, accepted all comers on a first-come, first-served or lottery basis¹⁷⁰.

¹⁶⁸ $t=14.45$, $df=753$, $p<.05$

¹⁶⁹ If age and gender are considered together, it is evident that male PWP participants in the Gundo Lashu programme were concentrated in their twenties (43% of the total), while female Gundo Lashu participants were older, being concentrated in their thirties (38%). Both male and female Zibambele participants were concentrated in their forties (31% and 38% respectively), with 68% of women being in their forties and fifties. This also reflects the Zibambele policy of recruiting female household heads as their priority employees, as, *de facto*, household heads are likely to be older than other household members.

¹⁷⁰ The preceding analysis makes the simplifying assumption that demographic characteristics are similar across the two provinces and therefore any disparities are not a consequence of provincial differences in demographics. While the two provinces enjoy similar demographic profiles, they are not identical, and this

The demographic difference between the two programmes is further illustrated by an analysis of the position of participants within the household structure, see Table 9.2.

Table 9.2: Location of Participants within Household Structure (%)

	Household head (%)	Partner of household head (%)	Children of household head (%)	Other (%)	Total (%)
Gundo Lashu (n=340)	22 (n=75)	20 (n=68)	45 (n=153)	13 (n=44)	100
Zimbabwe (n=415)	68 (n=282)	24 (n=100)	4 (n=17)	4 (n=17)	100

Source: Own calculations using PWP Survey 2003.

Comparing participants who are either household heads or partners of households heads with all other participants across the two samples, a chi-square test indicates a significant difference between the two samples.¹⁷¹ Some 68% of the Zimbabwe participants were household heads, and a further 24% were the spouses of household heads, rendering 92% of all participants household heads or spouses of heads. Only 42% of their Gundo Lashu counterparts fell into this category, with the participants more likely to be the children of household heads. This suggests that the two programmes were recruiting different household segments, participants of differing ages and positions within the household hierarchy, and consequently, it may be imputed, with different labour market functions and responsibilities within the household.

These demographic findings are consistent with the Gundo Lashu practice of employing i) all available participants seeking full-time work, or ii) randomly selected participants who were available for full-time work, but not explicitly the poor, while the Zimbabwe programme focused on recruiting poor rural female household heads who, by definition, would tend to be older, and comprise a group for whom full-time work, such as that offered in the Gundo Lashu programme, may have been unattractive due to competing domestic

approach is refined in the following analysis.

¹⁷¹ $\chi^2=218.3$ at 0.05 significance level, with df=1.

responsibilities; a factor which would not represent a similar constraint for younger household members without the same burden of domestic responsibility.

It could be argued that extending PWP employment to the different groups of participants identified above is appropriate given the elevated unemployment rate in rural areas and the pervasive difficulties of gaining access to employment. However, these demographic incidence differences are problematic if the objective of the programme is the provision of social protection, rather than employment provision *per se*, particularly given the limited scale of PWP employment and the extensive rationing of PWP employment which this implies.

In addition, the social protection discourse suggests that transfers to women tend to deliver greater human and social capital benefits at a household level than transfers received by men (Appleton and Collier, 1995:563; Hoddinott and Haddad, 1995). This supposition is supported with reference to South Africa by Duflo (1999), who found that the welfare impact of pensions received by women had a significantly greater impact on household welfare than those received by men. This was affirmed during focus group discussions conducted among PWP participants in Limpopo and KwaZulu-Natal where female participants argued that PWP wage transfers received by men (and youth) had a more limited impact on household welfare than those received by women.¹⁷² This challenges the limited participation target for women in the Gundo Lashu programme, given the objective of poverty reduction. It also highlights the potential tension between the objectives of poverty reduction and enhancing labour market participation among the youth (McCord, 2003).

The human capital indicators, maximum attained education level and literacy, may also be used to contribute to the socio-economic profiling of PWP participants. The Gundo Lashu participants had a modal education level of Grade 8 to 10 (36%) while for Zibambele participants the mode was 'no education' (31%) (see appendix 3).

¹⁷² The reduced welfare benefits accruing to households where youth and males were the PWP participants, were voiced by female participants in the Gundo Lashu programme during focus group discussions in Sekhukhune, Limpopo, in April 2003. Participants in the Zibambele programme also highlighted, during focus group discussions in Eshowe and Mapumulo, the more limited household benefits accruing from wage transfers to men rather than women household members, in February 2004.

When these findings were disaggregated to control for age and gender, it was found that in every age cohort the modal level of education of Zibambele participants was lower than that of Gundo Lashu participants (see appendix 4). Literacy rates follow a similar pattern when disaggregated by age and gender, with Zibambele participants again having lower literacy rates than the Gundo Lashu participants in all age categories (see appendix 5). A chi-square test indicates that while literacy rates are not significantly different between male Gundo Lashu and Zibambele workers, except in the 30–39 age category, for female workers between the ages of 20 and 50 literacy rates are significantly different between the two sets of workers.¹⁷³

These findings are also consistent with the greater emphasis on poverty targeting in the Zibambele programme and support the argument that the participants in the two different programmes may come from different socio-economic population segments.

These individual differences offer insights into the different targeting outcomes of the two programmes, and in order to explore these insights in more detail, it is necessary to locate the participants within their household context and identify their socio-economic location within their communities. To achieve this, an analysis of the characteristics of the households to which PWP participants belong is carried out, first using simple comparative analysis, and then using a propensity score matching approach.

9.4 PWP Household Characteristics

In this section, the characteristics of households within which the PWP participants were located are identified, and compared to the general population using key household variables, in order to assess their relative socio-economic status. Comparison is made to the Census 2001 10% sample for rural Capricorn district data for the Gundo Lashu programme, and rural KwaZulu-Natal provincial data for the Zibambele programme, including only black rural census respondents in both cases.

¹⁷³ For men in the 30–39 age category, $\chi^2=6.45$, $p=0.011$, while for female workers in the three categories between the ages of 20 and 50 $\chi^2=4.03$ and $p=0.045$, $\chi^2=7.45$ and $p=0.006$, and $\chi^2=5.35$ and $p=0.037$ respectively ($df=1$, at 0.05 significance level).

Household Head Characteristics

First the characteristics of the household heads are examined by reviewing their gender and education attainment.

The incidence of female headed households was significantly different in the two samples.¹⁷⁴ 40% of the Gundo Lashu households were female-headed, compared with a 54% prevalence in Capricorn District, Limpopo, implying that fewer female-headed households were included in the programme than would be expected if PWP employment were randomly distributed among the population. By contrast 70% of the Zibambele households were female-headed, compared with a provincial prevalence of 58%, suggesting that the policy of targeting female-headed households in this programme was successfully implemented¹⁷⁵. These findings are notable given the positive correlation between female-headed households and poverty in Africa (IFAD, 1999), suggesting that there may be a greater poverty focus in the Zibambele targeting.

The maximum educational attainment of household heads in each programme is compared by gender with the respective provincial/district levels, in Tables 9.3 and 9.4. Table 9.3 illustrates that while fewer male Gundo Lashu household heads have no schooling than household heads overall in Capricorn district (20% and 30% respectively), this is not reflected in the case of female Gundo Lashu household heads whose rate of 'no schooling' may be compared to that of female household heads in the general population (48% and 44% respectively). For both genders, Gundo Lashu households report a lower percentage of household heads having completed secondary or tertiary education than the district mean.

¹⁷⁴ $\chi^2=69.01$ at 0.05 significance level, with $df=1$

¹⁷⁵ Given South Africa's history of migrant labour an elevated female household head rate is prevalent in rural areas of the country, particularly those which were previously labour reserves.

Table 9.3: Household Head Education Level in Capricorn and Gundo Lashu Households by Gender

	Capricorn District		Gundo Lashu	
Education Level of Household Head	Male (%)	Female (%)	Male (%) (n=154)	Female (%) (n=103)
No schooling	30	44	20 (n=31)	48 (n=49)
Some primary schooling	21	15	23 (n=35)	22 (n=23)
Complete primary schooling	8	6	8 (n=12)	7 (n=7)
Some secondary schooling	27	24	36 (n=55)	17 (n=18)
Grade 12 / Standard 10	10	7	5 (n=8)	1 (n=1)
Higher education	4	4	1 (n=2)	0 (n=0)
Other			7 (n=11)	5 (n=5)

Source: Own calculations using PWP Survey 2003 and Census 2001.

Table 9.4: Household Head Education Level in KwaZulu-Natal and Zibambele Households by Gender

	KwaZulu-Natal Province		Zibambele	
Education Level of Household Head	Male (%)	Female (%)	Male (%) (n=121)	Female (%) (n=285)
No schooling	41	52	38 (n=46)	35 (n=100)
Some primary schooling	25	23	33 (n=40)	42 (n=120)
Complete primary schooling	7	5	8 (n=10)	8 (n=23)
Some secondary schooling	19	14	20 (n=24)	13 (n=37)
Grade 12 / Standard 10	6	4	1 (n=1)	1 (n=3)
Higher education	2	2	0 (n=0)	0 (n=0)
Other			0 (n=0)	1 (n=3)

Source: Own calculations using PWP Survey 2003 and Census 2001.

The percentage of Zibambele household heads with no schooling was lower than average in the province, particularly among the women (35% compared with 52%), suggesting that at the bottom end of the education distribution the level of household head education may be slightly superior in PWP households. However, if the bottom two education categories are

taken into account, both groups (PWP household heads and overall household heads) have similar education profiles, with 75% and 77% of women respectively having no or incomplete primary education, and 70% and 71% of men, respectively. It is interesting to note that the percentage of PWP households attaining Grade 12 or above is below that for the overall population for both sexes, suggesting that the PWP households may be less well educated than the provincial mean.¹⁷⁶ Overall, at the bottom end of the education distribution Zibambele household heads have attained higher levels of education than the provincial norm, and at the top end lower levels, which may indicate a narrower distribution of educational attainment among this group.

Asset Ownership

Households were asked to report on ownership of a list of eleven items, in order to assess their levels of material asset ownership (the full responses are outlined in appendix 6). The Zibambele households had lower levels of ownership of assets in all categories, and chi-square tests indicate that the difference in asset ownership between the Gundo Lashu and Zibambele groups was significant in all categories excepting ownership of books and beds (see appendix 7). In order to compare asset ownership with the control populations, television and radio ownership is compared to the Census 2001 data for the rural Capricorn district and KwaZulu-Natal province, in Table 9.5. Only these two assets have been selected out of the full set included in the PWP Survey, as these are the ones which are included in both the PWP Survey, and the Census data on asset ownership.

This Table indicates that the material asset base of the Gundo Lashu households is similar to or superior to the average for the Capricorn population, while that of the Zibambele households is significantly below the KwaZulu-Natal average. Regression analysis taking the log of household income as the dependent variable and asset ownership as the explanatory variable using the Census 2001 data, indicated that radio and television ownership were both closely correlated with log household income, with the coefficients of impact on log household income being 0.38 and 0.46 for radio and television respectively for Capricorn,

¹⁷⁶ It should be noted however, that given the low number of data points in the higher education categories that the significance of these observations may not be statistically verified.

and 0.48 and 0.63 for KwaZulu-Natal. This indicates that these two variables may be useful proxies for assessing relative household income in the absence of comparable household income data, with ownership of either asset indicating a higher level of household income than non-ownership, and television ownership being associated with greater household income than radio, adding an additional level of nuance to the analysis. The implication of this is that low relative asset ownership among Zibambele households compared to the Census 2001 data, and the high relative asset ownership levels in the Gundo Lashu households compared to Census data, again suggests that the Zibambele participants were drawn from a poorer segment of the local population than the Gundo Lashu households.

Table 9.5: PWP and Census Asset Ownership

	Gundo Lashu	Capricorn District	Zibambele	KwaZulu-Natal Province
	% households reporting ownership			
Television	40 (n=105)	39	14 (n=58)	28
Radio	80 (n=210)	71	57 (n=235)	67

Source: Own calculations using PWP Survey 2003 and Census 2001.

Social Grant Receipt

A range of social assistance grants are provided in South Africa for the indigent, and the linkage between grant receipt and household poverty reduction in South Africa has been well documented, with households in receipt of higher value grants (such as the Old Age Grant) by definition falling outside the poorest decile, by virtue of the value of the transfer (Leibbrandt and Woolard, 2001). In order to capture the extent of grant receipt among the PWP households, each household was asked what grants they received. The Old Age Grant, Disability Grant, Child Support Grant, Care Dependency Grant and Foster Care Grant were the main state transfers reported by respondents and the two most significant transfers in terms of incidence, the Child Support Grant and the Old Age Grant, are discussed in detail below.

49% of Gundo Lashu households and 28% of Zibambebe households received the Child Support Grants for one or more children, with Gundo Lashu households having a 66% take-up rate, and Zibambebe households 36%.¹⁷⁷ These take-up rates may be compared with the overall (rural and urban) provincial take-up rates of 48% in Limpopo and 62% in KwaZulu-Natal in February 2003 (Guthrie, 2003).¹⁷⁸ Hence, among the Gundo Lashu households take-up is higher than the provincial average (66% compared to 48%) while among Zibambebe households take-up is significantly lower than the provincial norm (36% compared to 62%). Interestingly the 36% rate of take-up among Zibambebe children is consistent with findings in rural KwaZulu-Natal by Case *et al.* (2002) who found a 33% take-up rate, suggesting that the rural/urban location of the PWP sample has a significant impact on take-up rates. Given the link established between grant income and poverty reduction this low grant take-up rate serves as an indicator of the poverty of Zibambebe households in relation to the provincial population overall, compared to Gundo Lashu households who were significantly more successful in accessing the grants to which they were entitled.

For both groups, take-up rates decreased as the number of eligible children increased; in Gundo Lashu households, take-up was 72% when one child was eligible, falling to less than 17% when three or more children were eligible. Among Zibambebe households, take-up rates were 40% when one child was eligible, falling to less than 6% of full take-up when three or more children were eligible. The issue of grant take-up was explored in the focus group discussions. This revealed that, while most participants were aware of their rights in terms of eligibility for the Child Support Grant, discouragement during the application process as a result of bureaucratic delays, and the opportunity cost of continuing with the process in the face of these delays was the primary factor limiting grant take-up.

¹⁷⁷ There were 256 eligible children in Gundo Lashu households of whom 169 received grants, and 462 eligible children in Zibambebe households of whom 165 received grants.

¹⁷⁸ These figures apply to take-up rates among 'poor' children, defined as those living below a poverty line of R400 per month in 2002. 99% of the sampled Zibambebe households, and 93% of Gundo Lashu households, fell below the HSL of R473 in 2003, and so the simplifying assumption has been made that it is appropriate to consider all the children in the sample poor for the purpose of comparison with national-level take-up of the CSG. Using an alternative poverty line, derived from the 2000 Income and Expenditure Survey, and January 2003 SOCPEN data, Samson *et al.*, (2003) found similar provincial take-up rates, 58% for KwaZulu Natal, and 56% for Limpopo.

Receipt of an Old Age Grant has been found to have a significant impact on welfare (Case and Deaton, 1998; Duflo, 1999), and so identification of Old Age Grant receipt in PWP households is a useful proxy indicator of household economic status. Thirty-two percent of Gundo Lashu households received state Old Age Grants, compared with only 9% of Zibambele households, reflecting a lower number of pensioners¹⁷⁹ in the Zibambele households and lower take-up rates.

The household take-up rate for the Old Age Grant was 80% in Gundo Lashu households¹⁸⁰ and 58% in Zibambele households¹⁸¹. This reflects the greater emphasis on poverty targeting in the Zibambele programme, where receipt of a state transfer was in some instances adopted as a criterion for exclusion from the programme. Hence, the low rate of pensioners and Old Age Grant take-up among the Zibambele group is indicative of the programme's successful targeting. The high incidence of pensioners and take-up rates among the Gundo Lashu group suggests less of a poverty focus in this programme.

The low Child Support and Old Age Grant take-up rate among the poor is paradoxical, as is the implication that poorer households in the sample have lower take-up rates than the better-off households, although when this is considered in the context where receipt of a transfer, such as a Old Age Grant or multiple Child Support Grants, is sufficient to move a household above the poverty line, this effect is not surprising. This research suggests that the low grant take-up among the poor is the consequence of both supply-side problems such as bureaucratic delays, and demand-side problems such as lack of documentation among the poor.¹⁸²

¹⁷⁹ The number of pensioners in the Gundo Lashu households was significantly higher than in the Zibambele households, with 0.45 pensioners per household, against 0.15 for the latter. A higher percentage of Gundo Lashu households included pensioners than the regional norm, with 38% of Gundo Lashu households containing members of pensionable age compared with the rural Limpopo figure of 33% (Stats SA, 2003a). By contrast, only 14% of Zibambele households included pensionable members, compared with a provincial rural norm of 39% (ibid).

¹⁸⁰ While 98 Old Age Grants were recorded and 118 household members were of pensionable age, four of those who reported pension receipt were not eligible, and were excluded from the analysis, see Case and Deaton (1998), and Ardington and Lund (1995), for a discussion of the payment of Old Age Grants to non-eligible recipients.

¹⁸¹ Three of the 38 reported as receiving pensions were not eligible and were therefore excluded from the analysis.

¹⁸² Kingdon has suggested that an additional explanation could be the under-reporting of grant income in

9.5 Propensity Score Matching to Assess PWP Incidence¹⁸³

Thus far, only demographic and basic household data have been used to inform the discussion of incidence, based on descriptive analysis and direct comparison with Census and LFS data. In order to assess income incidence, which is critical in terms of assessing the poverty targeting of the two programmes, propensity score matching techniques are used in order to construct an income profile of PWP participants which may be reviewed in the context of the income distribution of the population from which participating households are drawn.

In this section, a propensity score matching (PSM) approach is adopted to gain further insight into the incidence of the two programmes in terms of the relative economic status of PWP workers. Direct comparison of income data between the PWP Survey and in the 2001 Census is not appropriate, since although income data are available in both, the Census income data are limited as they do not provide detail on income from different sources and offer only banded income data. In addition, the income inflation during the two-year period between Census and survey implementation also makes direct comparison between the two surveys invidious. To overcome this problem, PWP Survey households were matched with Census households on the basis of a number of household characteristics excluding income, using a technique called propensity score matching (PSM), developed by Rosenbaum and Rubin (1983). The income distribution of the matched households was then compared to that of the other households in the survey areas in order to assess incidence. Other household characteristics were also compared across the two groups.

PSM is typically used to evaluate programme impacts by identifying a ‘control’ group with similar characteristics to the ‘treatment’ group and comparing the outcomes of the groups on a particular variable, such as unemployment status. In this case, however, the aim was not to select a comparator group for purposes of impact evaluation, but rather to identify

poor households in the hope of promoting eligibility for PWP employment, particularly given that in the Zibambe programme, receipt of a state transfer is a criterion for exclusion from the programme. However, given the close community scrutiny of income flows within Zibambe households indicated above in the focus group discussion, this explanation does not seem likely in this instance. (G Kingdon, May 2004, pers. comm.)

¹⁸³ This section is based on McCord and Wilkinson (2009).

households similar to the PWP households in the Census, in order to ascertain their income status relative to the overall population, to provide an insight into incidence.

The use of PSM in the analysis of characteristics of households taking part in PWPs in KwaZulu-Natal and Limpopo is not typical, in that i) it is not being used for programme impact evaluation, and ii) PSM is most often used to match individuals with other individuals, rather than matching households as in this instance. However, the use of PSM in a non-evaluation method is not problematic, as the basic assumption, that the probability of selection into the treatment group is the same for participants and non-participants, is not broken. Also, many examples can be found in the literature where matching has been used for households (and other units of analysis), such as Mendola (2007) in Bangladesh; Arun *et al.* (2006) in India and Guarcello *et al.* (2003) in Guatemala. What is important in determining the unit of analysis is that the unit is appropriate given the particular area of interest and that the unit of analysis does not compromise the quality of the match. For example, in this case the aim is to compare the household characteristics of PWP-participating households with other households in the local area. This could be done by matching households (which is the method used) or matching the individuals who are PWP workers and then comparing household characteristics. The second method is less satisfactory in this case because there is insufficient comparable individual level information in the Census which would compromise the quality of the match. Thus, in order to compare the characteristics of households, it is most appropriate to match at household level rather than individual level.

Matching Households

The first step in the matching process is the generation of a propensity score for each case in the PWP Survey and the Census by running a probit model with the binary outcome variable equalling 1 where the household is drawn from the PWP Survey and 0 where the household is not a PWP household (i.e. drawn from the Census). The resulting propensity score can be interpreted as the probability that any household (from the Census or survey) will contain a PWP participant. For each of the PWPs, survey and Census cases were pooled and a separate probit model run for each PWP group, the one using Census data from the rural Capricorn district, and the other from rural KwaZulu-Natal province overall. The propensity score is then used to select a 'matched' household from the Census. The independent

variables in the model are the characteristics on the basis of which the households are matched. The following characteristics were used:

- Age of head of household
- Gender of head of household
- Highest level of education achieved for head of household
- Number of people in household
- Dependency ratio (the number of dependents in the household divided by the number of 'working-age' members – dependents are under 15 or over 64)
- Type of dwelling (traditional or non-traditional)
- Household ownership of a television
- Household ownership of a radio

The survey cases included in the model were all cases without missing variables on any of the matching characteristics. To be included in the pool of possible Census matches, households had to fulfil certain conditions, namely:

- Their accommodation type is a 'housing unit' (other accommodation types such as hostels and student accommodation were excluded)
- The head of the household was Black African
- The household resided in a rural area
- The household included at least one person of working age (aged 15-64)
- The household had no missing values for any of the matching characteristics
- The household resided in the Capricorn District (for Limpopo only)

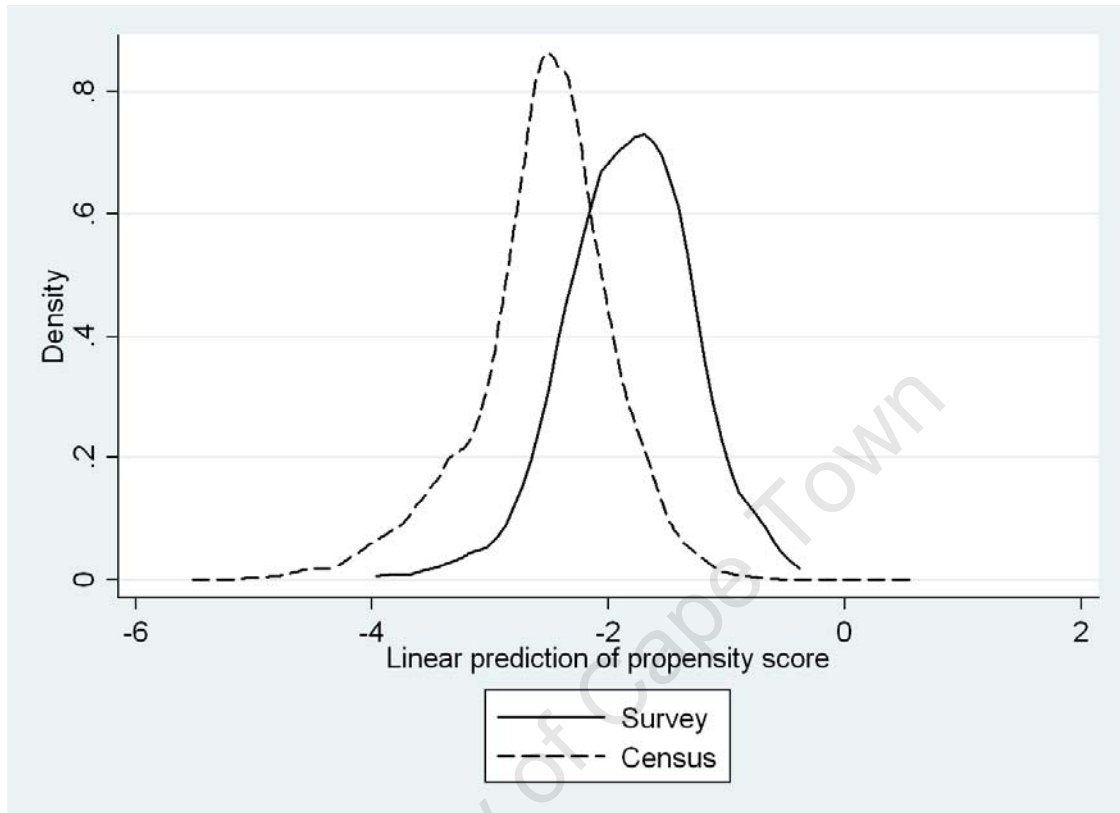
The resulting sample comprised 238 survey and 17,440 census households in Capricorn District, Limpopo and 400 survey and 66,841 census households in KwaZulu-Natal province. The matching specification employed was nearest neighbour matching where the census household with the propensity score closest to the PWP household was selected into the comparison group. The data were randomly sorted prior to running `psmatch2` as the sort order can impact upon the selection of households into the matched group. The 'no replacement' option was used, meaning that each matched household can only be selected once and after selection a household is removed from the pool of potential matches. Not

allowing replacement simplifies the calculations as it means that matching weights do not have to be taken into account.

The linear prediction of the propensity scores for each group is shown in Figures 9.1 and 9.2. As might be expected, the distribution of propensity scores is wider for the census households than for the PWP Survey households. Critically, the PWP Survey households all lie within the range of ‘common support’, such that each PWP household can be matched to a Census household with a similar propensity score. This result indicates that the Census contains households that are similar enough to the survey households to provide suitable matches.

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Figure 9.1: Propensity Score Distribution for Census and Survey Households – Capricorn

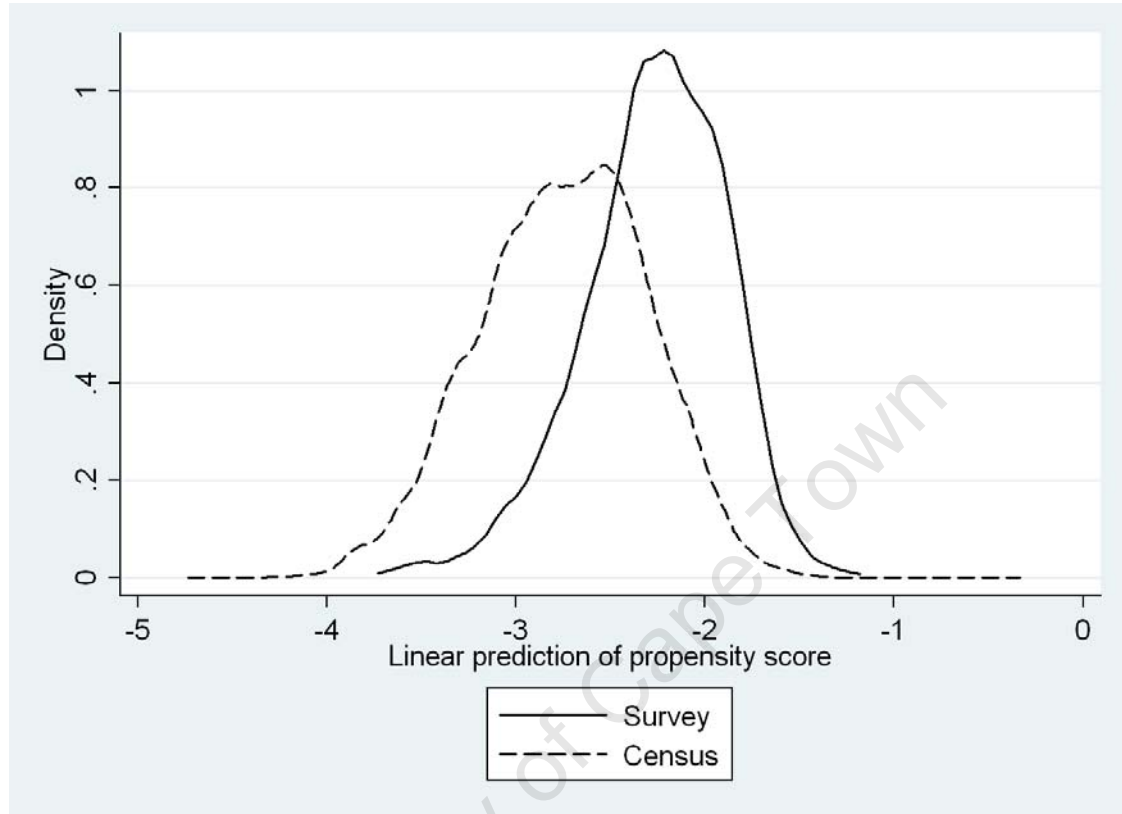


Source: McCord and Wilkinson (2009) using PWP Survey 2003 and Census 2001.

Having generated a propensity score for each household, the next step of the matching process was to use the programme `psmatch2`¹⁸⁴ to match households from the PWP Survey with similar households from the Census according to the propensity scores of the two sets of households. The result was the selection of households within the Census who were assumed to be similar to the households in the PWP Survey.

¹⁸⁴Leuven, E and Sinaesi, B, available from: <http://ideas.repec.org/c/boc/bocode/s432001.html>.

Figure 9.2: Propensity Score Distribution for Census and Survey Households – KwaZulu-Natal



Source: McCord and Wilkinson (2009) using PWP Survey 2003 and Census 2001.

The characteristics of the matched and survey group were very similar, indicating that the matching technique worked successfully and that the matched cases are sufficiently similar to be used in further analysis to assess programme incidence. The matched and PWP groups differ slightly in their values for the dependency ratio, with the matched households containing more children and fewer adults than the PWP households, resulting in a slightly larger dependency ratio. This may be an artefact of a difference between the Census and PWP Survey questionnaires in terms of the definition adopted for assessing the number of people normally residing in the household¹⁸⁵. In the analysis that follows, the assumption was

¹⁸⁵ The Census only records people staying in the household on the census day, while the PWP survey included all those who resided in the household for at least 15 days per year.

made that the matches are appropriate and successful, despite the weighting of the Census cases not being taken into consideration¹⁸⁶.

Data Analysis

After selecting a matched group of households, a number of comparisons were made between the characteristics of the matched households and those of other households in the local area in order to assess incidence, firstly in terms of a variety of household characteristics indicative of socio-economic status, and then in terms of income. The following groups are referred to in the text below and are defined as follows:

- ‘Matched’ – all matched households drawn from the Census (note that this only includes households with at least one working age member)
- ‘Non-matched’ all non-matched households from the original Census matching pool, including households without any working-age members
- ‘Census’ – ‘Matched’ and ‘Non-matched’ groups as defined above, combined
- ‘Non-matched working age’ – as ‘Non-matched’ but excluding households with no working-age members

Matching Results: Household Characteristics (Non-income)

Tables 9.6 and 9.7 show the household characteristics for the household groups outlined above. As would be anticipated, these results are consistent with the profile emerging from the comparative analysis above.

¹⁸⁶ One difficulty here was that the objective is to compare the income distributions of the matched and non-matched group, and, as the Census data is a 10% sample, this can only be correctly done by applying the appropriate household weights. Unfortunately, `psmatch2` does not take account of the household weights and each Census case is taken to represent a single household (when in practice it generally represents around 10 households). However, examining the Census weights it can be seen that the majority are very close to 10, and a comparison of the characteristics of the survey group with the matched group with and without applying the Census weights indicates that this does not significantly alter the closeness of the match, as indicated in appendices 9 and 10.

Table 9.6: Household Characteristics – Capricorn

Characteristic	Matched	Non-matched	Non-matched with working-age members	Census
Mean age of head of household	56.24	47.85	46.90	47.96
Mean household size (persons)	7.02	4.39	4.50	4.42
Dependency ratio*	0.72	1.06	1.06	1.05
Dependency ratio (whole population)**	0.67	0.96	0.91	0.95
Traditional dwellings	11.22%	9.58%	9.56%	9.60%
Owning a TV	40.72%	39.42%	40.03%	39.44%
Owning a radio	85.71%	71.52%	71.91%	71.70%
Female-headed household	43.20%	58.58%	58.09%	58.38%
Household heads with no schooling	35.79%	39.10%	37.94%	39.05%
Household heads with some primary schooling	26.75%	17.02%	16.83%	17.14%
Household heads with complete primary schooling	5.02%	7.09%	7.18%	7.07%
Household heads with some secondary schooling	28.22%	24.92%	25.65%	24.96%
Household heads with Grade 12 / Standard 10	3.77%	7.83%	8.16%	7.78%
Household heads with higher education	0.44%	4.05%	4.24%	4.00%

Source: McCord and Wilkinson (2009) using Census 2001.

Notes: * The household dependency ratio cannot be calculated for households with no working age members.

** The whole population dependency ratio is the total number of dependants in the group divided by the total number of non-dependants, including households with no working-age members.

Table 9.7: Household Characteristics – KwaZulu-Natal

Characteristic	Matched	Non-matched	Non-matched with working-age members	Census
Mean age of head of household	48.64	48.27	47.61	48.27
Mean household size (persons)	7.09	5.09	5.20	5.10
Dependency ratio*	0.93	0.95	0.95	0.95
Dependency ratio (whole population)**	0.81	0.85	0.82	0.85
Traditional dwellings	87.52%	55.20%	54.85%	55.38%
Owning a TV	13.35%	27.23%	27.76%	27.16%
Owning a radio	57.36%	67.45%	67.97%	67.40%
Female-headed household	73.25%	53.90%	53.51%	54.01%
Household heads with no schooling	34.88%	46.96%	46.19%	46.90%
Household heads with some primary schooling	44.41%	23.68%	23.80%	23.79%
Household heads with complete primary schooling	5.38%	5.82%	5.90%	5.81%
Household heads with some secondary schooling	13.63%	16.28%	16.62%	16.26%
Household heads with Grade 12/ Standard 10	1.69%	5.15%	5.30%	5.13%
Household heads with higher education	0.00%	2.12%	2.18%	2.11%

Source: McCord and Wilkinson (2009) using Census 2001.

Notes: * The household dependency ratio cannot be calculated for households with no working age members.

** The whole population dependency ratio is the total number of dependants in the group divided by the total number of non-dependants, including households with no working-age members.

In Limpopo, matched households have older household heads, are larger, are less likely to be female-headed and have fewer non-working age members than the overall population. In

terms of education levels the households are fairly similar. The matched households have fewer household heads with further or higher education. The dependency ratio for the matched population is much lower than the dependency ratio for the census as a whole. This indicates that matched households have relatively more working-age than non-working age members.¹⁸⁷

Table 9.7 indicates that in KwaZulu-Natal, matched households are larger, more likely to live in a traditional dwelling, and more likely to be female-headed than the overall population, reflecting the targeting of women in the Zibambele programme. The matched households are less likely to own a TV or radio but the household head is more likely to have had some primary education, and less likely to have completed secondary education. The dependency ratio for the matched population is similar to the overall Census dependency ratio of 0.85, which is higher than the figure for the whole province reported above (0.63), mainly due to the exclusion of urban households.

9.6 PWP Incidence on the Basis of Income Distribution

The primary purpose of the PSM exercise was to locate the PWP households within the overall population income distribution in order to assess programme incidence in terms of the income status of participating households. Having identified adequate matches for the PWP Survey households, as indicated above, the final step was an assessment of incidence on the basis of income, to compare the income distributions of the Census households in the matched group with the other households in the comparison areas for each PWP. The matched households were compared to the sample from which the match was originally drawn.

¹⁸⁷ It should be noted that at 0.95, the Census population dependency ratio is higher than the figure reported for Limpopo province above (78.7) (Health Systems Trust, 2003). This is likely to be largely the result of excluding particular groups from the census population, as excluding urban households increases the dependency ratio substantially. Appendix 8 shows the impact of excluding different groups on the overall dependency ratio.

The income distributions for matched, non-matched, non-matched working-age and Census households are shown in Tables 9.8 and 9.9 below¹⁸⁸. These tables indicate that 35.2% of PWP households in Capricorn and 57.1% of households in KwaZulu-Natal fall in the bottom 40% and 45% of the income distribution respectively.

Table 9.8: Household Income Distribution – Capricorn

Income category (monthly household income)	Matched	Non-matched	Non-matched working age	Census
No income	35.2%	40.1%	41.6%	40.0%
R1-R400	9.7%	14.5%	14.8%	14.5%
R401-R800	41.7%	33.3%	31.0%	33.4%
R801-R1600	7.5%	5.3%	5.5%	5.4%
R1,601-R3,200	5.0%	3.8%	4.0%	3.9%
R3,201-R6,400	0.9%	2.2%	2.3%	2.2%
R6,401-R12,800	0.0%	0.5%	0.5%	0.5%
R12,801-R25,600	0.0%	0.1%	0.1%	0.1%
R25,601+	0.0%	0.1%	0.1%	0.1%

Source: McCord and Wilkinson (2009) using Census 2001.

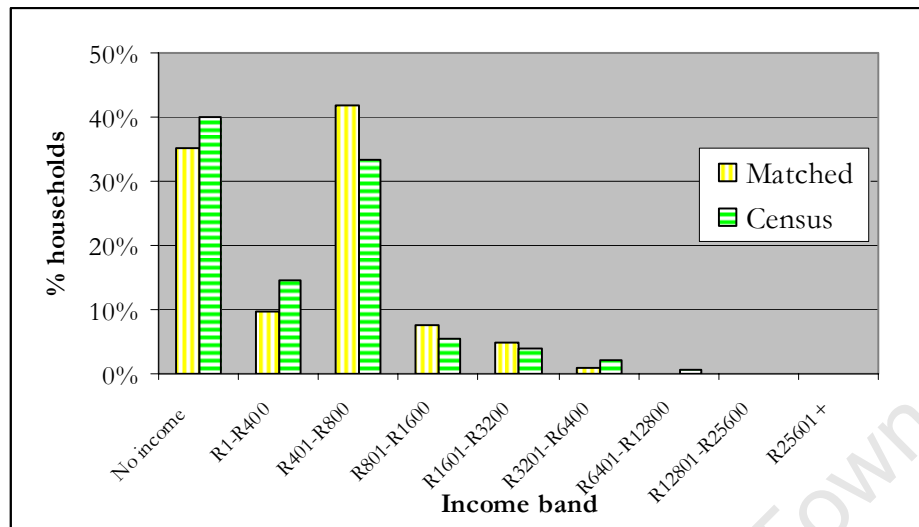
¹⁸⁸ Inclusion of the household with no working age members group does not significantly alter the results and the values for the Census group are very close to the value of the non-matched group: this is due to the fact that there are many more cases in the non-matched than matched group

Table 9.9: Income Distribution – KwaZulu-Natal

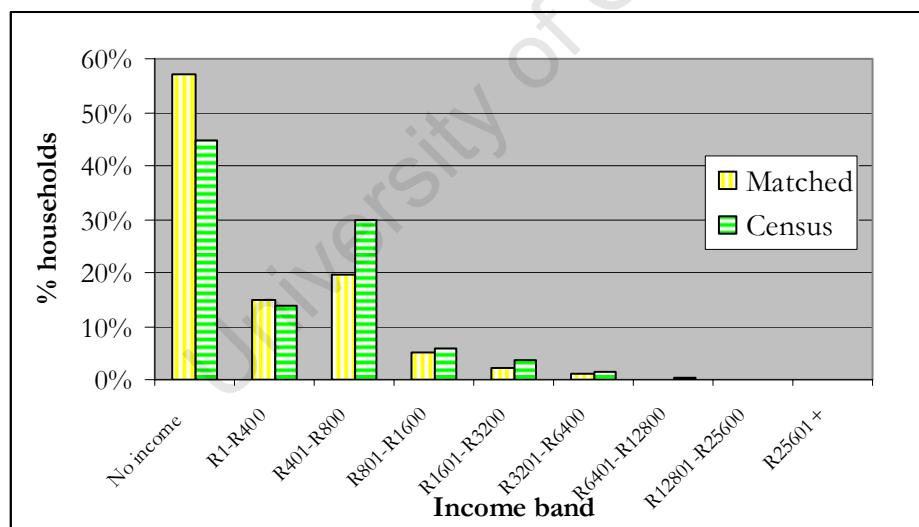
Income category (monthly household income)	PWP	Non-PWP	Non-PWP working age	Census
No income	57.1%	44.7%	45.6%	44.8%
R1-R400	15.0%	13.8%	14.0%	13.8%
R401-R800	19.8%	29.7%	28.4%	29.7%
R801-R1600	5.0%	5.9%	6.1%	5.9%
R1,601-R3,200	2.2%	3.8%	3.9%	3.8%
R3,201-R6,400	1.0%	1.6%	1.6%	1.6%
R6,401-R12,800	0.0%	0.4%	0.4%	0.4%
R12,801-R25,600	0.0%	0.1%	0.1%	0.1%
R25,601+	0.0%	0.1%	0.1%	0.1%

Source: McCord and Wilkinson (2009) using Census 2001.

The income distributions for the matched and Census groups are shown graphically in Figures 9.3 and 9.4. The two groups differ in that the Capricorn matched households appear generally to be better off across the distribution, having fewer households in the bottom two income groups and more households in the third income group. In KwaZulu-Natal, the matched households are generally poorer than the non-matched households, with almost 75% of the PWP group in the bottom two income groups. In terms of the incidence of poverty amongst the general population, in both Capricorn and KwaZulu-Natal more than 40% of all households in the Census group record zero income.

Figure 9.3: Income Distribution for Matched and Census Households – Capricorn

Source: McCord and Wilkinson (2009) using Census 2001.

Figure 9.4: Income Distribution for Matched and Census Households – KwaZulu-Natal

Source: McCord and Wilkinson (2009) using Census 2001.

A chi-square test confirms that the income distributions of the matched households are significantly different from the non-PWP households for both groups; for Capricorn the results were $\chi^2=33.48$, $p=0.0399$, and for KwaZulu-Natal $\chi^2=70.93$, $p=0.0001$ (null hypothesis is that the distribution of income is identical between the PWP and non-PWP households).

Table 9.10 shows the estimated mean income per month for households in each of the groups. Interestingly, if the mean household income between matched and non-matched households are compared¹⁸⁹, the difference between the mean household income for matched and non-matched households in Capricorn is significant only at the 5% level, whereas the difference for KwaZulu-Natal is statistically significant at the 1% level and the gap between matched and non-matched household incomes is much wider.¹⁹⁰

Table 9.10: Mean Household Income

Mean household income (R per month)	Capricorn	KwaZulu-Natal
Matched	521.25*	307.34**
Non-matched	624.52*	620.00**
Non-matched working age	626.90*	623.00**
Census	623.20	618.32

Source: McCord and Wilkinson (2009) using Census 2001.

Notes: * Significant at the 5% level.

** Significant at the 1% level (matched and non-matched groups are compared).

Mean equivalised household income is also compared between the different groups of households. As the matched households tend to be larger, this results in the equivalised income for matched households being lower than for the non-matched households. The difference is statistically significant for both groups at the 1% level. However, the difference is much larger for households in KwaZulu-Natal.

¹⁸⁹ This is done by assigning the mid-point of each income band to each household in that income band.

¹⁹⁰ It should be noted that the income of the non-matched working age group is only slightly higher than that of the group including households with no working age members. The reasons for this are that household sizes tend to be large with several generations living together so there are relatively few households with no working age members. In addition, households containing pensioners may be in receipt of an Old Age Grant and so may even have higher household incomes than households containing working age people who are unable to find employment.

Table 9.11: Mean Equivalised Household Income

Mean equivalised household income (R per month)	Capricorn	KwaZulu-Natal
Matched	141.74**	74.89**
Non-matched	281.25**	266.54**
Non-matched working age	273.64**	261.22**
Census	279.47	265.51

Source: McCord and Wilkinson (2009) using Census 2001.

Notes: * Significant at the 5% level.

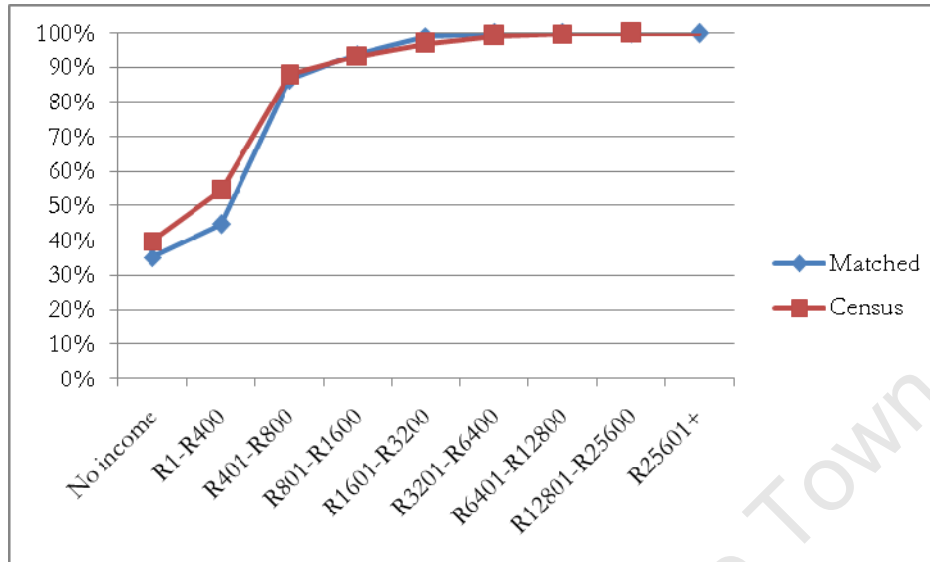
** Significant at the 1% level (matched and non-matched groups are compared).

Given that i) the matched households were slightly larger than the survey households as they tend to contain more adults and fewer children and ii) that the calculation is based on banded income data, the results should be treated with caution. However, it is clear that matched households in KwaZulu-Natal are relatively poorer compared to non-matched households than is the case in Capricorn where the income of matched and non-matched households are closer together (though still significantly different from one another at the 5% level).

Cumulative Distribution

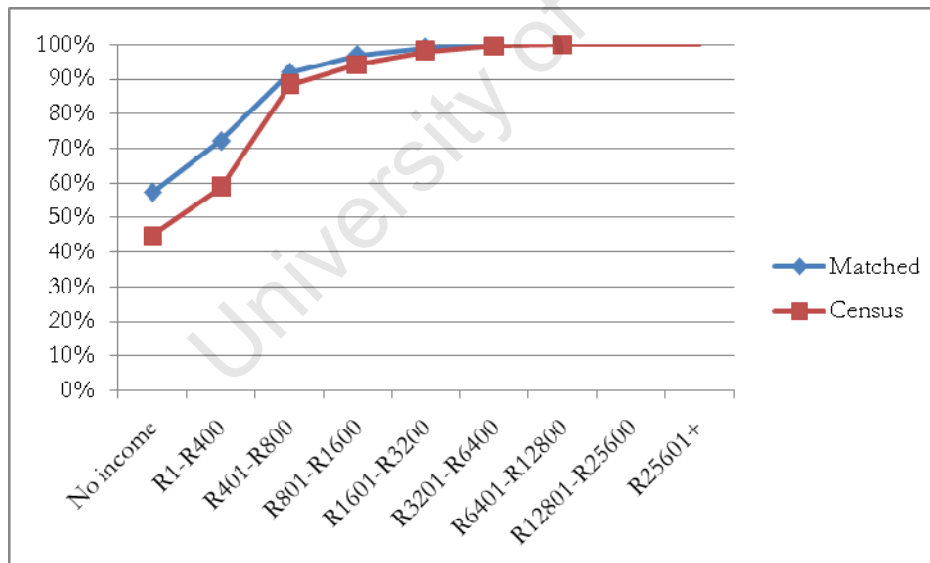
The cumulative distribution of the household income of matched households is presented in Figures 9.5 and 9.6. This illustrates the differential poverty incidence in the two programmes, based on PSM income bandings for matched households. These figures indicate that on the basis of the PSM matching, the lower income bands were under-represented in the Gundo Lashu programme, relative to their share of the overall population, whereas in the Zibambele programme lower income bands were over-represented among participants, with the percentage of PWP households exceeding the percentage of members of the overall population in the lower income bands illustrating a greater degree of poverty targeting in the Zibambele programme. Only 45% of Gundo Lashu matched households had an income of R400 or less per month compared to 55% of the total number of households in the sample, while in contrast, 72% of the Zibambele matched sample had an income of R400 or less, compared to only 59% of the total number of census households.

Figure 9.5: Cumulative Distribution of Census Income and PWP Matched Income - Capricorn



Source: McCord and Wilkinson (2009) using Census 2001.

Figure 9.6: Cumulative Distribution of Census Income and PWP Matched Income – KwaZulu-Natal



Source: McCord and Wilkinson (2009) using Census 2001.

The cumulative distribution of income in matched households illustrated in Figures 9.5 and 9.6 can be used to draw some conclusions regarding incidence of the two programmes, linking the PWP Survey analysis and PSM results with current research into assessing social protection programmes' poverty incidence. The preceding analysis suggests that in the

Gundo Lashu programme, 35.2% of programme households were below the 40th income percentile, while for the Zibambebe programme, 57.1% of households were below the 45th income percentile (the 45th percentile is adopted in place of 40th as it is the closest approximation possible given the banding approach adopted in the Census, rather than continuous variable, which a 40th specification would require). Caldes *et al.* (2004) cite work by Coady *et al.* (2002) who reviewed more than 100 social protection programmes and found that the ‘median targeting performance was consistent with 50% of programme benefits accruing to the poorest 40% of the population’ (Caldes *et al.*, 2004:31). On this basis, Zibambebe programme incidence would fall above this median targeting performance at 57%, and Gundo Lashu below, at 35%, with the poor receiving 1.27 times their population share in the case of the Zibambebe programme, and 0.875 in the Gundo Lashu programme, representing a significant difference between the two programmes. This confirms the incidence conclusions drawn from the demographic data, that the Zibambebe programme was more effectively targeted at the poor than the Gundo Lashu programme

9.7 Comparing PWP ‘Matched’ Households and Non-PWP Households Using Logistic Regression

It is possible to explore differences in the characteristics of the matched and non-matched households in more detail using a logistic regression model. Such a model is beneficial as it controls for the effect of other variables, making it possible to estimate the independent impact of each independent variable, while controlling for other factors. A logit model is run for each group with a binary dependent variable indicating matched or non-matched status, using the characteristics outlined in Tables 10.6 and 10.7, together with household equivalised income¹⁹¹, based on the Census income bands, as the independent variables. A household (rather than population) dependency ratio has been included as an independent variable, and in this case the groups compared are the matched and the non-matched with the working-age members group, as the dependency ratio cannot be calculated for households with no working-age members.

¹⁹¹ Equivalised household income is calculated following Leibbrandt and Woolard, 2001, where $E = (A + \alpha K)\theta$, E =the number of adult equivalents, A =number of adults, α =the child cost ratio, K =number of children, and θ the household economies of scale factor. Values used are $\alpha=0.5$ and $\theta=0.9$.

The odds ratios and β coefficients from the logit models are shown in Tables 10.8 and 10.9. In KwaZulu-Natal the effect of education level on participation in the PWP was found to vary by gender of the household head so an interaction between household head gender and education level was included in the model.¹⁹²

In both Capricorn District and KwaZulu-Natal equivalised household income was found not to be a significant predictor of PWP participation. This implies that if there were two households with otherwise identical characteristics and one contained PWP participants and the other did not, the participating household could not be reliably identified on the basis of equivalised household income. In the earlier analyses asset ownership (specifically ownership of a TV and/or radio were identified as being good proxies for income. However, here income and assets appear to have quite differing effects. Whilst both are able to predict participation in the absence of any other control variables, once other characteristics are controlled for income has a non-significant effect regardless of the inclusion of asset ownership in the model and the significant impact of asset ownership does not depend upon whether or not household income is included in the model. This suggests that the relationship between income and assets is not straightforward.

Table 9.12 shows that as the household size increases by one person and the age of the household head increases by one year, a household is respectively 1.41 and 1.04 times more likely to have a PWP participant. Education seems to play a significant role: households where the head has some primary education are twice as likely to have PWP participants compared to households where the head has no schooling, and households where the head has some secondary education are three times more likely to have PWP participants. As illustrated in Table 9.8, households that have no dependent members are 3.5 times more likely to have members participating in a PWP than those households that have equal numbers of dependents and non-dependents¹⁹³, possibly illustrating the Barrett and Clay

¹⁹² Other interactions were explored in the analysis, but this was the only one that was found to be significant.

¹⁹³ The coefficient of 0.29 relates to the ratio of the odds that a household with equal numbers of dependents and non-dependents will take part to the odds that a household with no dependent members will take part. Inverting this ratio (1/0.29) gives the odds that a household with no dependent members will take

thesis (Barrett and Clay, 2003) that PWP participation may be an attractive option where there is surplus household labour with low marginal value.

The impact of assets and income is particularly interesting as households with a TV are less likely to participate (as we might expect as these will be high income households) whereas households with a radio are twice as likely to participate. This seems to indicate that the poorest households (i.e. those owning neither a TV nor a radio) and the richest (those owning a TV) are less likely to participate. Households who are poor but still able to afford some assets (i.e. a radio) are the most likely to participate.

part relative to a household with equal numbers of dependents and non-dependents which, as quoted in the text, is 3.5.

Table 9.12: Household Characteristics, Logistic Regression - Capricorn

Characteristic	Odds ratio	β	Standard Error
Mean age of head of household	1.0372**	0.0366**	0.0050
Mean household size (persons)	1.4143**	0.3467**	0.0266
Dependency ratio	0.2859**	-1.2522**	0.1761
Traditional dwellings (reference – not living in a traditional dwelling)	1.0960	0.0914	0.2239
Owning a TV (reference – households without a TV)	0.7472*	-0.2914*	0.1415
Owning a radio (reference – households without a radio)	1.9990**	0.6925**	0.1993
Female-headed household (reference – male-headed households)	0.7875	-0.2388	0.1419
Household heads with some primary schooling (reference – household heads with no schooling)	2.1830**	0.7805**	0.1827
Household heads with complete primary schooling (reference – household heads with no schooling)	1.1938	0.1772	0.3263
Household heads with some secondary schooling (reference – household heads with no schooling)	2.9714**	1.0890**	0.1981
Household heads with grade 12 / standard 10 (reference – household heads with no schooling)	1.7487	0.5589	0.3788
Household heads with higher education (reference – household heads with no schooling)	0.2999	-1.2045	0.8746
Household equivalised income	0.9999	-0.0001	0.0002

Source: McCord and Wilkinson (2009) using Census 2001.

Notes: * Significant at the 5% level

** Significant at the 1% level

Number of observations=17,440, population size=437,336, $F(13,17427)=23.00$, $p<0.01$

Table 9.13: Household Characteristics, Logistic Regression – KwaZulu-Natal

Characteristic	Odds ratio	β	Standard Error
Mean age of head of household	0.9933	-0.0067	0.0033
Mean household size (persons)	1.1810**	0.1664**	0.0118
Dependency ratio	0.7097**	-0.3428**	0.0610
Traditional dwellings (reference – not living in a traditional dwelling)	4.9515**	1.5997**	0.1590
Owning a TV (reference – households without a TV)	0.4421**	-0.8163**	0.1539
Owning a radio (reference – households without a radio)	0.6949**	-0.3640**	0.1050
Female-headed household (reference – male headed households)	1.7984**	0.5869**	0.1911
Household heads with some primary schooling (reference – household heads with no schooling)	2.0744**	0.7300**	0.2334
Household heads with complete primary schooling (reference – household heads with no schooling)	0.6681	-0.4033	0.6033
Household heads with some secondary schooling (reference – household heads with no schooling)	1.7210	0.5429	0.2911
Household heads with grade 12 / standard 10 (reference – household heads with no schooling)	1.0990	0.0943	0.5959
Household heads with some primary schooling*female-headed household	1.8106*	0.5940*	0.2678
Household heads with complete primary schooling*female-headed household	3.8001*	1.3351*	0.6572
Household heads with some secondary schooling*female-headed households	1.1458	0.1376	0.3460
Household heads with grade 12 / standard 10*female-headed households	0.7889	-0.2371	0.7862
Household equivalised income	0.9996	-0.0004	0.0003

Source: McCord and Wilkinson (2009) using Census 2001.

Notes: * Significant at the 5% level

** Significant at the 1% level

Number of observations=66,839, population size=2,102,960, $F(16,66823)=34.83$, $p<0.01$

The effect of the education level of the head of the households is particularly interesting given that the descriptive analysis in Table 9.6 does not indicate any significant differences in

the education levels of the heads of matched and non-matched households. Finally, when controlling for other characteristics there is no effect of household income, thus, household income does not appear to have a significant influence on a household's decision to participate in a PWP. Although the likelihood of participation decrease as income increases, the effects are small and insignificant.

Table 9.13 indicates that an increase in the size of the household also increases the likelihood of PWP participation in KwaZulu-Natal, but the age of the head of the household is not significant. Again, the education level of the head of the household is important, with households where the head has some primary education approximately twice as likely to have PWP participants compared with households where the head has no schooling. Female-headed households are also almost twice as likely to be PWP participants (reflecting the targeting of women-headed households). The impact of the education level of the head of the household varies by gender: female-headed households with some primary education are 3.75 times more likely to have PWP participants compared to female-headed households with no schooling¹⁹⁴ and 3.25 times more likely to have participants than male-headed households with an equivalent level of schooling. As supported by the cross-sectional analysis, matched households have fewer dependent members, are more likely to live in a traditional dwelling and are less likely to own a television or a radio. Again, controlling for other factors, household income is not a significant factor in the participation decision, although the (non-significant) coefficient on income suggests that the likelihood of participation does decrease as income increases.

9.8 Discussion of Incidence Analysis

The main conclusions from the preceding analysis are that the Gundo Lashu households appear, on average, to be better off across both the income distribution and a range of other socio-economic indicators than the overall population from which they are drawn, while on the same basis, the Zibambele households are much poorer than the overall population. Logistic regression analyses comparing matched and non-matched households whilst

¹⁹⁴ The odds ratio for female-headed households with some primary schooling relative to female-headed households with no schooling is calculated by multiplying the odds for households with some primary schooling (2.0757) by the odds for female-headed households with primary schooling (1.8090).

controlling for their different characteristics indicate that the level of education of the head of the household appears to be important, with household heads with some basic education being more likely to contain a PWP participant, compared with household heads with no schooling. In KwaZulu-Natal, the impact of education varies according to the gender of the household head, with the strongest effects seen for female-headed households, where having some basic education makes participation much more likely.

In both cases, after controlling for other household characteristics, household income appears not to have a significant impact on whether or not a household participates in PWP. This is a particularly interesting finding given that there are significant differences in the income levels of the matched and non-matched households. One explanation for this could be that PWP employment was not provided on a sufficient scale to absorb all households living in poverty, and so the available jobs were distributed between poor households. The regression analyses indicate that whilst there appeared to be no variation in income between households that did participate and those that did not, controlling for other characteristics shows that certain types of poor households were more likely to participate than others. The income analysis confirms that the PWP households are poorer than the non-PWP households, as would be expected, but when the analysis is extended it indicates that although the PWP households are poorer they are no poorer than would be expected given their characteristics, and whilst PWP participation appears to be random on some variables (for example income) others such as education level and dependency ratios have a significant impact, indicating that some types of poor households are missing out because of particular characteristics. These findings would merit further analysis into factors which may exclude certain types of poor households from gaining access to employment through PWPs. Other factors may also be acting to exclude households from participation. Whilst an excess of labour supply (meaning that some poor households had to be excluded) seems plausible in the case of the Zibambele programme, in the Gundo Lashu programme it was reported that the recruitment of sufficient labour in the local area was problematic, and as a consequence, immigrant labour from outside the project area was recruited. While this appears to be contradictory to the findings set out above that there were still large numbers of poor households who did not take part in the programme, in part it may be possible to explain this in terms of the fact that the Gundo Lashu programmes were extremely localised, and it

may also indicate that the 'local' poor were less able to compete successfully with less poor 'outsiders' in terms of gaining access to PWP employment. Again, this would be an interesting area for future study.

The findings regarding the impact of the effect of the dependency ratio on the participation decision may be related to the relationship between income and the participation decision. In both cases it was found that, as the number of dependents in the household increased relative to the number of non-dependent persons, the likelihood of PWP participation declined. The effect was much stronger in Capricorn than in KwaZulu-Natal, which may reflect the fact that the Gundo Lashu programme only offered full-time employment whilst the Zibambele programme provided more flexible part-time employment. The findings here suggest that the ability of a household to care for non-dependent members may have a significant impact on a household's ability to participate in a PWP.

The interpretation of these results relies on how well the matching characteristics used allowed selection of similar households from the Census data. Comparison of the matched group with the survey group indicates that they are very similar, aside from small differences in the dependency ratio already discussed, but it is important to consider that the groups may differ on unmatched characteristics that may impact upon the income distribution and other characteristics of the households selected. It is likely that households similar across a number of characteristics will also be similar across unobserved factors, but this cannot be guaranteed. Further matching variables would have been desirable but could not be generated in a consistent form from both data sets. Because of this, the results should be treated with a degree of caution. However, given that the match is robust and the results confirm findings from other analyses of the data, they are considered to provide a reasonably reliable view of the income status and general characteristics of PWP households in relation to other households in the same area. On this basis it can be concluded that the analysis in this chapter has illustrated consistently that, over a range of different indicators, the poverty incidence of the Zibambele programme was significantly superior to that of the Gundo Lashu programme.

9.9 Conclusion

The conclusion drawn from this case study exploration of PWP targeting and incidence is that both programme design and implementation modalities have a significant impact on programme poverty incidence. Empirical analysis of the PWP Survey revealed that significantly different demographic and socio-economic segments of the population participated in the two different case study programmes. In the type B Zibambebe programme with explicit poverty targeting objectives, utilising community selection techniques, and offering flexible employment, the poor received 1.27 times their population share of the PWP employment. By contrast, in the type A/C Gundo Lashu programme, which relied on self-targeting and offered full-time non-flexible employment opportunities, the poor received only 0.88 of their population share of employment. This low share is particularly noteworthy given the fact that the demand for labour in the latter programme exceeded locally available supply at times but even so, the poor were unable to access their share of employment, highlighting the relative failure of the poor to compete successfully for PWP employment.

The case study has suggested that active poverty targeting, rather than reliance on the work conditionality, is required to promote the share of programme benefits transferred to the poor, and that by tasking community groups with selection, where community groups enjoy a degree of programme ownership in the context of a long-term relationship between local communities and implementing agencies, it is possible to promote the participation of the very poor, a relationship which, by definition, is more likely to be achieved in type B programmes. By contrast, in the context of the short-term case study programme (conforming to PWP types A and C) which was implemented by contractors without explicit poverty targets or incentives, the poverty incidence of participants was significantly lower, with the poorest being under-represented in the PWP participant group.

The case study also suggests that the quality of employment provided may impact on incidence, with labour-constrained households in particular, which are likely to be among the more vulnerable, experiencing some degree of exclusion from PWP participation. This indicates the need to consider the quality of employment provided in terms of flexibility, household labour substitutability, part-time nature, etc in order to defray the participation

disincentives for labour-constrained households, and promote PWP participation among the more vulnerable.

The demographic characteristics of the PWP workers differ in the two programmes, with the Zibambele workers being predominantly female, household heads, and significantly older than the Gundo Lashu participants, who tended to be the children of the household head, and of equal gender proportions. Also, while the Zibambele households had only one PWP worker, multiple PWP employment was common in the Gundo Lashu households. The data analysis, PSM analysis, and direct comparison with Census 2001 and the LFS 2003 all suggest that different segments of the population were being targeted in each programme.

These differences are consistent with the targeting and rationing methods used in each case, and the fact that the Zibambele programme was explicitly (and *exclusively*) poverty-targeted, while the Gundo Lashu programme was more plural in its objectives, aiming to address both poverty and labour market issues through the same intervention.¹⁹⁵ The effectiveness of the community-targeting mechanism in the Zibambele case was contingent on significant investment in social development by the implementing agency over a period of years, which was possible because of the extended duration of the programme and hence, the sustained nature of the relationship between the workers, the programme, and the community institution managing the programme at the local level.¹⁹⁶ It is not clear whether such issues can be addressed in the context of short-term employment projects, particularly when they are implemented by the private sector, and when neither targets nor incentives for targeting the poor are in place, particularly given the additional expenditure on social development required. The limited poverty focus of the Gundo Lashu programme is illustrative of this problem, confirming research on the MEGS in India, which has also found evidence of the negative implications for poverty targeting of private sector implementation, due to the

¹⁹⁵ For a discussion of the conceptual and implementational difficulties and inefficiencies arising from PWP programmes with plural objectives, see McCord (2003).

¹⁹⁶ A further indication of the community ownership of the programme was the social regulation of the distribution of the scarce resource of PWP employment within the community.

inherent tension between profit-based incentives and the social investment required to ensure the inclusion of the poorest.¹⁹⁷

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¹⁹⁷ S Pellissery, Department of Social Policy and Social Work, Oxford University, 2004, pers. comm.

10 LABOUR MARKET INCIDENCE AND IMPACT

Having ascertained the incidence of the two case study PWPs in the previous chapter, in terms of the demographic and socio-economic status of participating households, programme incidence is now examined from a labour market perspective by examining the labour market characteristics of PWP participants and their households. Also, an assessment is made of the impact of PWP skills development and work experience (the second vector of social protection transmission) on the employment performance of participants in each programme.

Despite the fact that PWPs are frequently presented as labour market, rather than social protection interventions (Vodopivec, 2004; Martin and Grub, 2001), there is a limited literature in this area, exploring the empirical realities of which segments of the labour force PWPs actually attract, and their labour market impact. There is little empirical analysis of the prior employment status of PWP participants (most frequently it is assumed, rather than empirically tested, that if targeted correctly, participants will be predominantly drawn from among the unemployed), or the household employment context to which PWP participants belong in terms of the labour market status of household members. Likewise there is limited research addressing the impact of PWPs on the subsequent labour market performance of participants, despite the fact that improved performance after PWP participation is a critical condition for the realisation of the 'graduation' objective so prevalent in the PWP rhetoric. Inasmuch as PWPs are included in the general ALMP cannon, there is some literature on the impact of type D PWPs (see, for example, Martin and Grub, (2001) and discussion in chapter seven), but the focus is primarily on PWPs within an OECD, rather than developing country context.

Hence, there is not an established literature in these areas, nor are there agreed methodological approaches to exploring them, and the available data are limited. In this context, the challenge is how to assess labour market incidence and impact, given the fact that within the PWP Survey there is a rich source of data on the case study PWP participants and their households' labour market status, which offers the potential for insights into not only individual labour market responses to a PWP, but also an initial exploration of some

issues of PWP-related household labour adjustment, another critical issue on which the current literature is silent. The aim of this chapter is to examine the data available from the two case studies, to see what insights and tentative conclusions can be drawn, although given the methodological and data constraints, it is not possible to draw robust statistical conclusions. Nevertheless, the exploration of the conceptual issues and questions in this area itself represents an important contribution to the literature, as is the explicit identification of these critical research lacunae. In this chapter, labour market impacts are also considered primarily at an individual level, taking into account both PWP participants and non-participant members of PWP households, in contrast to the previous chapter which examined household level income and other poverty indicators of incidence, and the following chapter, which examines programme impact in terms of household effects. Within this discussion it is recognised that individual actions have significance for household labour allocations, and that the household level response to PWP employment will, to a large extent, dictate the social protection impact on the household, given the mutual linkages between the labour market responses of PWP participants and other household members, in terms of substitution.

10.1 Structure of the Chapter

First, the labour profile of PWP workers and households members is sketched, examining labour force participation rates, the distribution of PWP and market employment, dependency ratios and unemployment rates. A detailed analysis of characteristics of PWP workers and their households is carried out and some initial conclusions regarding incidence are drawn based on these characteristics. Next, the labour market origins of PWP workers are examined in order to gain further insight into PWP incidence, and PWP participants' engagement with local labour markets. Questions relating to the second round intra-household labour substitution and employment implications of PWP employment are then explored. This analysis also offers some illumination of the question of PWP incidence in terms of the extent to which PWPs are i) bringing the unemployed into employment, as generally anticipated, ii) increasing participation rates, or iii) repositioning those already in employment. The impact of the training and work experience component of PWPs is then explored, including an examination of the impact on informal and self employment, in order

to assess whether PWP participation confers the additional labour market returns anticipated in the literature, in terms of the 'ladder into the labour market' function. Finally, the constraints to employment as reported by the PWP participants themselves in the survey and focus group interviews are explored in order to assess programme performance in relation to workers' own labour market experiences.

10.2 The Labour Profile of PWP Workers and Households Members

The labour profile of PWP workers and household members is set out in Table 10.1.

Table 10.1: Labour Market Characteristics of PWP Workers and Household Members

	Zimbabwe		Gundo Lashu			
	All household members	Excl PWP*	All household members	Excl PWP**	Excl current PWP***	Former PWP workers
Potentially economically active (n)	1500	1105	911	600	782	182
Unemployed & seeking work (n)	413	411	304	181	304	123
Unemployed & not seeking work (n)	26	26	5	3	5	2
Working (n)	490	99	261	98	132	34
Participation rate	62%	49%	63%	47%	56%	87%
Narrow Unemployment rate	46%	81%	54%	65%	70%	78%
Broad Unemployment rate	47%	82%	54%	65%	70%	79%

Source: Own calculation from PWP Survey 2003.

Notes: * All workers in Zimbabwe households excluding the PWP workers
 ** All workers in all Gundo Lashu households excluding current and former PWP workers
 *** All workers in all Gundo Lashu households excluding current PWP workers

The participation rate among all members of Gundo Lashu households was 63%, and 56% if current PWP participants were removed from the analysis. For Zimbabwe households, the participation rates were 62% and 49% respectively. The overall participation rates may be

compared with the national (broad) rate of 68% (Stats SA, 2004). In both groups the higher participation rates with the inclusion of PWP participants could be explained in two ways, either i) in terms of the PWP participants having higher rates of participation within the household, reflecting a pre-existing labour market difference between PWP and non-PWP household members, or ii) it could be an artefact of the fact that the PWP is actively bringing non-participants into the labour force. Since no baseline data are available on PWP participants, it is not possible to identify the relative importance of these two factors, although it is possible to draw some inferences from PWP participants' responses to questions relating to work forgone. This is discussed in the next section of this chapter.

Increased levels of labour force participation among PWP participants may not be the consequence of the same processes in both programmes, given the demographic differences between the two groups. The higher participation rate is particularly striking in the Zibambele programme: an increase of 13%. This increase in female labour force participation resulting from the PWP was noted in focus group discussions in KwaZulu-Natal, where participants stated that the Zibambele programme had made possible the entry of women into the labour market, for whom alternative opportunities were not available. The impetus for the increased female participation rates is explained by Posel and Casale in the following terms:

‘Changes in household composition and marital rates, together with increasing job and income insecurity and rising levels of male unemployment, [...] placed increased pressure on women to earn or generate an income’ (2003:469-70)

When suitable part-time employment became available in remote rural areas through the implementation of the PWP, it was possible for women to respond to this pressure by taking work which was compatible with their domestic responsibilities. It is interesting to note that this effect has been observed elsewhere as a consequence of the implementation of PWPs offering employment of a kind which is accessible to women (for example, in terms of flexible or part-time hours). An example is the Jefes programme in Argentina, the implementation of which directly led to a significant rise in female labour force participation (Harvey, 2007b).

Dependency Ratios

The dependency ratio is the ratio of the economically dependent part of the population to the productive part,¹⁹⁸ which indicates the economic burden the productive portion of a population must carry, with a higher figure indicating a heavier burden of care on those who are of working age. The dependency ratio within the Gundo Lashu population is 0.67, which may be compared to a provincial dependency ratio for Limpopo of 0.79 (Health Systems Trust, 2003), and a dependency ratio of 0.95 for the black population of rural Capricorn (Census 2001). This indicates that the Gundo Lashu dependency ratio is significantly below both the provincial norm, and also the directly comparable rural district figure, suggesting a higher number of working age members per dependent in Gundo Lashu households than in the overall population, and implying a lower degree of vulnerability among this subgroup of the Limpopo population. By contrast, within the Zibambele population the ratio is 0.84. While this is significantly higher than the ratio of 0.64 for provincial rural KwaZulu-Natal province (*ibid*)¹⁹⁹, it is consistent with the ratio of 0.85 for the black population in rural KwaZulu-Natal (Census 2001). This implies that the Gundo Lashu households may have a significantly lower proportion of dependants than in the local population, while the Zibambele households may be broadly consistent with the local population in terms of dependants, possibly confirming Barrett and Clay's assertion regarding the potential for PWP's to attract surplus labour, rather than drawing participants from labour constrained households.

Employment History

The employment history of PWP and non-PWP household members is outlined in Table 10.2 below.²⁰⁰

¹⁹⁸ The dependency ratio is calculated on the basis of the number of those not of working age, divided by the number of those of working age, defined as those between 15 and 64.

¹⁹⁹ The provincial figures are taken from the Health Systems Trust website, <http://www.hst.org.za/healthstats/23/data/geo>, and are based on Stats SA 2003 Mid Year Estimates P0302 2003. Downloaded on 24 January 2008.

²⁰⁰ Former rather than current Gundo Lashu household data have been used in this discussion, as current data are missing for Gundo Lashu households due to a coding error.

Table 10.2: PWP Workers' and Household Members' Employment Experience

	Zimbabwe				Former Gundo Lashu			
	PWP Partici- pants (n=335)	Mean age	Non Partici- pants (n=976)	Mean age	PWP Partici- pants (n=149)	Mean age	Non Partici- pants (n=540)	Mean age
Last employed 2+ years ago	44% (n=149)	49	12% (n=114)	46	17% (n=26)	50	12% (n=66)	45
Never employed	24% (n=82)	44	76% (n=748)	22	37% (n=55)	31	80% (n=432)	25

Source: Own calculations from PWP Survey 2003.

Among former Gundo Lashu PWP participants, 37% had never been employed before engagement in the PWP, and 17% had not been employed for two years or more prior to their PWP participation. This compares with 24% and 44% respectively among the Zimbabwe participants. In both cases the difference between the two samples was significantly different, with the Zimbabwe workers including significantly fewer of those who had never been employed, and significantly more long term unemployed, with previous work experience.²⁰¹ This higher percentage of Gundo Lashu participants without previous labour market experience is consistent with the greater proportion of youths in the programme. In terms of previous work experience, among non-PWP members of former Gundo Lashu households, 80% had never worked before and 12% had not worked for two years or more, while in Zimbabwe households the figures were 76% and 12% respectively. Chi-square tests indicate that in neither case were the experiences in these two groups

²⁰¹ $\chi^2=27.86$ at 0.05 significance level, with $df=1$ for those who had never been employed before, and $\chi^2=32.64$ at 0.05 significance level, with $df=1$ for those who had been unemployed for more than two years.

significantly different, with both sets of households displaying similar patterns of labour market engagement.²⁰²

Distribution of Employment

The distribution of employment (both PWP- and market-based) among PWP households is set out in Table 10.3. Some 149 Gundo Lashu households had no members currently employed as PWP participants, as their PWP contracts had been completed prior to the interview. These are referred to as former Gundo Lashu households in the text below.

Among former Gundo Lashu households, 47% reported no currently employed members, 39% one employed member, and 14% two working members or more, while among those with current PWP employment, 56% of households had one person employed and 44% two or more employed. Among Zibambele households 82% reported only one working household member (the PWP participant), with only 18% having two or more. This implies a particularly heavy reliance on PWP employment within the Zibambele households. It is interesting that a comparison between former and current Gundo Lashu household employment data gives no indication of employment substitution. While it is likely that intra-household labour substitution did take place to some degree, this table suggests that it may have been in areas of activity which were not considered by respondents as ‘employment’.

²⁰² $\chi^2=2.27$ at 0.05 significance level, with $df=1$ for those who had never been employed before, and $\chi^2=0.1$ at 0.05 significance level, with $df=1$ for those who had been unemployed for more than two years.

Table 10.3: Total Number Employed per Household (Including PWP Employment)

No. employed per household	Gundo Lashu		Zibambele
	Former (% of households) n=149	Current (% of households) n=119	(% of households) n=413
0	47 (n=70)	0 (n=0)	0 (n=0)
1	39 (n=58)	56 (n=67)	82 (n=339)
2	11 (n=16)	35 (n=42)	14 (n=58)
3 or more	3 (n=4)	9 (n=11)	4 (n=17)

Source: Own calculations from PWP Survey 2003

Employment Patterns

In the Gundo Lashu households 30% of all labour market participants reported having worked during the last seven days, in response to the question:

‘During the past seven days did ... work for Zibambele/Gundo Lashu, work on subsistence agriculture, on a kitchen garden or plot, work for wage income of any kind (regular or casual), or engage in any kind of self-employment or income-generating activity, however small?’ (PWP Survey, 2003)

However, if this is broken down by the PWP participant status, only 21% of former Gundo Lashu participants reported having worked recently,²⁰³ compared with 35% of labour force participants who were not PWP participants. This challenges the notion that participation in PWP activity will significantly enhance labour market performance, at least in the short to medium term. It could be argued that this low level of employment immediately after PWP participation could be an artefact of ‘Ashenfelter’s dip’, the name given to the frequently observed phenomenon of former PWP participants experiencing low employment rates immediately after the cessation of PWP employment, during the period of job search and relocation in the labour market, reflecting a form of temporary or frictional unemployment,

²⁰³ It should be noted that exit from the programme was involuntary, resulting from the short-term nature of the employment offered under the Gundo Lashu programme, and as such does not represent a voluntary termination of employment or indicate that participants are ‘graduating’ into alternative employment opportunities.

rather than an accurate indicator of a steady state of unemployment among recent PWP graduates (Ravallion, 2003). However, if the employment performance of former Gundo Lashu participants is analysed on the basis of the period of time between completion of PWP employment and the survey interview, no such effect can be identified. Forty-eight percent of former PWP participants had completed employment less than three months prior to the survey and 52% three months or more (up to nine months previously), and the respective employment rates were 19% and 18%, indicating no discernable Ashenfelter's dip, but rather a uniformly poor labour market performance across all former PWP participants. The reason cited by respondents for their poor labour market performance after participation in the PWP was primarily lack of demand for labour (75%).

What is clear from the PWP Survey is that levels of unemployment among non-PWP participants were extremely high. Only 35% of Gundo Lashu and 18% of Zibambeke non-PWP participants had worked recently. Of the non-PWP participants in Gundo Lashu households who reported working recently, 49% were engaged in regular wage labour, 26% in casual wage labour, and 12% in both subsistence agriculture and non-farm enterprises. If disaggregated by gender 53% of men and 43% of women reported engaging in regular wage labour, and 24% and 28% respectively in casual wage labour.

By contrast, only 18% of Zibambeke household members reported being employed in regular wage labour. If this figure is decomposed by gender, 21% of men and 15% of women were found to be engaged in regular wage labour, with 67% and 56% respectively being engaged in casual wage labour. A higher percentage of female participants than male were active in non-farm enterprises: 15% as against 5%. Zibambeke labour market participants faced a more insecure relationship with the labour market than those from Gundo Lashu, as 63% of Zibambeke employment was in the form of irregular casual labour, compared with 26% of Gundo Lashu employment. This is linked to the more limited employment opportunities in

the Zibambebe areas, with less access to agricultural sector employment than in the Gundo Lashu catchment area.²⁰⁴

Interestingly, a small number of Zibambebe participants (n=11, 2.7% of the total number of PWP workers) reported temporary work activity (RDP housing construction, factory work, temporary farm labour, domestic work and domestic production) which they carried out while engaging in PWP employment, and offered as a reason for not finding additional 'employment'. This suggests that the extent of temporary or episodic employment may be greater than is captured in the survey, in terms of respondents offering a negative response to the questions regarding recent employment, while simultaneously engaging in a range of informal or temporary activities. This finding is consistent with the work of Adato *et al.* (2004) which characterises much employment as episodic and short-term, and not considered by respondents as 'work'.²⁰⁵ This indicates that the relationship between PWPs and the labour market may be more complex than is often assumed, inasmuch as i) PWPs participants may not necessarily be unemployed prior to PWP participation, even if that is how participants perceive themselves in terms of their own definition of 'work', and ii) PWP workers may engage in a range of concurrent activities during PWP participation, if the programme can offer sufficient flexibility.

The PWP Survey revealed high levels of engagement in subsistence agriculture at a household level in both groups, with 67% of Gundo Lashu and 87% of Zibambebe households reporting domestic agricultural production.²⁰⁶ These figures indicate that domestic household production was taking place in the majority of the households whose members engaged in PWP employment, as a complement to both formal and informal sector waged employment. Notwithstanding the high numbers of households reporting subsistence agriculture activity, levels of agricultural output were perceived by respondents

²⁰⁴ Access to alternative employment opportunities was discussed in focus groups with Gundo Lashu participants in December 2003, and with Zibambebe participants in February 2004.

²⁰⁵ This is also indicated by the spike in informal sector employment recorded in the LFS (February 2002), which was carried out subsequent to an additional survey on informal sector work, which shifted conceptualisation of informal work as 'work' in the minds of respondents.

²⁰⁶ Zibambebe levels of subsistence agricultural engagement were significantly higher than Gundo Lashu, $\chi^2=43.55$ at 0.05 significance level, with $df=1$.

to be limited by external factors. The main factor limiting agricultural activity among Gundo Lashu households was insufficient access to land (53%), followed by lack of cash to purchase inputs (18%), and lack of water (14%); the last-mentioned concern related to the occurrence of a drought during the two years prior to the interview (2001 and 2002). During focus group discussions the drought was raised as a serious concern, with the last significant harvest in the area having taken place in 2000. It is likely that this factor has seriously inhibited domestic agricultural production among the Gundo Lashu households. The same three factors were identified by the Zibambele households, but the order of importance differed, with lack of cash for inputs being identified as the primary constraint (33%), followed by insufficient access to land (31%), and then lack of water (10%). The implication of these findings is that access to cash through PWP wages could potentially have a positive impact on domestic production by enabling the purchase of agricultural inputs.

Unemployment

The broad unemployment rate among all Gundo Lashu household members, including current PWP participants, was 54.2%.²⁰⁷ This may be compared to a rate of 59.7% for the rural provincial population, derived from the March 2003 LFS (Stats SA, 2003a), see Table 10.4. The presence of current PWP employment in the labour market obscures the underlying unemployment rate among participating households, treating PWP participants as participants rather than members of the unemployed who are engaging in temporary PWP employment. If it is assumed that there is no substitution of employment (for example, swapping non-PWP employment for PWP employment, and shifting of labour and domestic work between household members), the prevailing unemployment rate in the PWP households can be ascertained by excluding current PWP employment. In this case, the broad unemployment rate among Gundo Lashu household members would be 69.7%.

²⁰⁷ The broad rate of unemployment will be used as the basis of discussion in this section since it is more appropriate than the narrow rate in a context where extremely high unemployment may lead even those who genuinely want work to become 'discouraged' and stop searching, as a rational response to the known unavailability of employment, following Kingdon and Knight (2000); and Nattrass (2000). The fact that participants are discouraged does not imply that their joblessness is of less policy concern, and hence it is appropriate to include this group of participants within the category of the unemployed.

However, it is likely that intra-household labour substitution would take place, which would imply a lower unemployment rate, although there are no data to indicate the extent of this.

Table 10.4: Limpopo Unemployment (Broad)

Non-urban Limpopo (LFS 2003)			All Gundo Lashu household members (inc former and current PWP participants)	Gundo Lashu household members (excl all PWP participants, former and current)	Gundo Lashu household members (excl current PWP participants)	Former Gundo Lashu PWP participants only
% unemployed						
All	Male	Female				
59.7	51.0	65.8	54.2	65.2	69.7	78.6

Source: Own calculations from PWP Survey 2003 and LFS March 2003 (Stats SA, 2003).

Interestingly, this rate falls to 65% if all PWP participants (past and present) are excluded, since unemployment is higher among former PWP participants than non-PWP participants (79% as against 65%).²⁰⁸ If it is assumed that there is some degree of substitution of employment among PWP participants, the underlying, non-PWP unemployment rate within Gundo Lashu households would fall between 54.2% (assuming 100% substitution) and 69.7%.

Unemployment among the Zibambeke households is set out in Table 10.5. The broad unemployment rate among all Zibambeke household members was 47%. If PWP workers are excluded, the figure is 82%, which is 24% above the rural provincial mean. Since only one third of Zibambeke (and Gundo Lashu) participants reported employment substitution, in terms of giving up some form of alternative remunerated employment in order to participate in the programme,²⁰⁹ it may be assumed that the underlying non-PWP unemployment rate

²⁰⁸ This may suggest that the PWP participants themselves comprise a group which is less successful in the open labour market than their non-PWP household colleagues, which could be an artefact of their particular demographic and individual skills and experience.

²⁰⁹ Three quarters of participants in both programmes reported giving up some form of alternative activities, but only one third reported giving up remunerated employment.

prevailing in Zibambele households falls towards the upper end of the range between the PWP and non-PWP unemployment rates, i.e. between 47.3% and 81.5%.

Table 10.5: KwaZulu-Natal Unemployment (Broad) add n

Non-urban KwaZulu-Natal (LFS 2003)			Zibambele household members (including PWP participants)	Zibambele household members (excluding PWP participants)
% unemployed				
Total	Male	Female	Total	Total
57.8	54.3	60.8	47.3	81.5

Source: Own calculations from PWP Survey 2003 and LFS March 2003 (Stats SA, 2003).

In both instances the ‘non-PWP’ unemployment rate is likely to fall between the inclusive figure, which takes into account PWP employment, and the exclusive figure, which assumes all PWP employment is additional. The actual extent of unemployment, whether it approaches the higher or lower bounds, is dependent on the extent to which labour substitution is taking place and PWP employment is replacing market-based employment, and also the degree of homogeneity between the PWP and non-PWP participant groups in terms of characteristics affecting labour market performance. If PWP participants are excluded, the unemployment rates are 10% and 24% in excess of the broad provincial figures in the Gundo Lashu and Zibambele programmes respectively, suggesting that unemployment in both case-study groups may be greater than the provincial norms, particularly in the case of the Zibambele households. This would be consistent with the expectation that the unemployment rate among PWP households would be greater than among non-PWP households because of the likely self-selection of households experiencing higher rates into PWPs. However, to the extent that PWP participants were employed prior to PWP participation, and are substituting PWP for alternative employment, excluding these workers could artificially inflate the estimate of unemployment in participating households in the absence of the PWP. Unfortunately, however, with the data available it is not possible to assess accurately the extent of employment substitution among PWP workers in terms of their prior employment.

10.3 Labour Market Origins of PWP Workers

In reviewing incidence, it is useful to attempt to gain insights into the labour market origins of the PWP workers. Conventional PWP theory argues that PWP workers would be drawn primarily from among the unemployed. The PWP Survey data analysis outlined above indicates that there may in fact be three potential sources for the case study workers: i) the unemployed (or discouraged); ii) those drawn out of alternative employment, in which case work substitution is taking place; and iii) non-labour market participants, drawn into the labour market by the PWP. The data indicate significantly different prior labour market status patterns in the two programmes. Using a chi-square test to compare the three categories of participants in both programmes suggests that the distribution of labour market origins of participants in the two programmes is significantly different,²¹⁰ reflecting both programme design and implementation differences. It is important to note however that these findings should be treated with caution, as the three states may not necessarily be discrete, and a degree of noise is anticipated in relation to each of the three prior labour market states. Each of the three potential sources of PWP participants are discussed below.

The Unemployed

As reported above, among former Gundo Lashu workers, 17% were long-term unemployed, having not worked for more than two years, and 37% reported never having worked, while 48% of Zibambebe workers were long-term unemployed, and 24% had never worked. In these cases PWP contributed to a net reduction in unemployment.

Those Drawn out of Alternative Employment

Where workers were drawn out of alternative employment, work substitution is taking place as a result of the PWP, with workers repositioning themselves in the labour market, rather than a net reduction in unemployment. This is likely to occur in the case of workers for whom employment was remunerated at extremely low levels or was precarious or unpredictable. One third of PWP workers reported giving up remunerated employment to participate in each of the programmes. Among the Gundo Lashu participants, casual wage

²¹⁰ A 3x2 test gives $\chi^2=6.99$ at 0.05 significance level, with $df=2$ (the critical value of the chi-square statistic at the 95% with 2 df is 5.99).

labour was the main form of employment given up (reported by 16% of workers), with 13% giving up non-farm activities (making goods for sale or providing services) and just 6% reporting giving up regular wage employment. Among the Zibambele participants, none reported giving up regular employment, 24% reported giving up casual labour employment and 14% non-farm activities. The reasons offered in the focus groups for this substitution were primarily that the PWP employment represented either i) better wages than their previous employment, or ii) an improved quality of work, with greater likelihood of ongoing employment and the attendant consumption smoothing potential compared to the sporadic employment offered in the market. Even though the Gundo Lashu programme did not offer guaranteed ongoing employment contracts, it did offer the potential for multiple month employment for some workers, and hence it may have been worth taking even temporary employment in the hope that the worker would be one of those able to secure longer term employment. It is possible also that the promise of training and construction work experience served as an incentive to forgo alternative work, on the basis of anticipated future labour market benefits in terms of potential integration into labour market resulting from increased skills and experience, although no evidence was found to support this contention.

It is possible and indeed likely, where household labour availability permitted, that some labour substitution was absorbed within the household, by a process of reoptimisation of labour allocations, with other household members taking up the activities forgone by the PWP participant. In this context, PWP-induced labour substitution might not represent employment (or income) forgone at the household level. However, the extent of this intra-household reallocation of labour is not indicated by the survey data. It is interesting to note that PWP households had a lower dependency ratio than the overall population, implying that the availability of labour in a household may have been a prerequisite for PWP participation, and hence may render such substitution more feasible, due to the presence of additional working age members. However, it is possible that this was due to the need for participating households to contain non-PWP household members of working age to take up the forgone domestic and unpaid labour burden of PWP participants, rather than to take on redistributed remunerated work.

Non-Participants

From the PWP Survey data, it is not possible to identify with certainty non-participants who entered the labour market as a result of the PWP work opportunity. However, 37% of Gundo Lashu workers and 24% of Zibambebe workers reported having never worked before, and it is likely that some of these are non-participants.

Given that the mean age of those reporting no previous labour market experience in the Zibambebe group was 44, this may represent workers entering the labour market for the first time, rather than unemployed workers (the mean age of those with no labour market experience in the non-PWP workers group was 22, which is likely to represent unemployed youth rather than non-participants). By contrast, the mean age of the Gundo Lashu workers entering the labour market for the first time was lower, at 31, although this could still include some non-labour market participants entering the labour market, rather than youth unemployed, since the mean age for those who had not previously worked in the Gundo Lashu non-PWP worker sample was only 25.

Conclusions Regarding Prior Labour Market Status

While data constraints prohibit any robust analysis, they indicate differing patterns in the two programmes. Approximately one fifth of Gundo Lashu PWP participants were long-term unemployed, two fifths had not previously participated in the labour force, and the same number had engaged in labour substitution. By contrast, just less than half the Zibambebe workers were long-term unemployed, one quarter had not previously participated in the labour force and approximately one third had engaged in labour substitution. So, while both groups had 30% of workers substituting PWP employment for prior employment (although the quality and remuneration of this employment was significantly different, see the following chapter), Gundo Lashu households had a significantly lower percentage of long-term unemployed, and a larger share of young labour market entrants without work experience. By contrast, the Zibambebe programme seems to have brought significant numbers of older women into the labour force. These findings are broadly consistent with the differing programme objectives, with Gundo Lashu providing employment for the youth unemployed without previous employment experience, and the Zibambebe offering support to the long-term unemployed and bringing older women into the labour market. The extent

of labour substitution in both programmes is interesting, perhaps indicating the poor quality of alternative employment open to participants. Whether such distortion is perceived as problematic or a positive artefact of the programme, is contingent on one's ideological stance, but in social protection terms it indicates that the PWP participation is perceived as offering greater household benefits, however defined by participants, than alternative market-based employment options.

10.4 Second Round Intra-household Labour Substitution and Employment

The foregoing analysis and discussion provokes a major question relating to intra-household labour effects, recognising that PWP-related labour substitution is not exclusively an individual, but rather an intra-household phenomenon. However, there is limited information on labour substitution within the PWP Survey, which only examined first round labour substitution effects at an individual level, i.e. substitution on the part of the PWP participant, and failed to examine secondary and subsequent intra-household substitution effects, and the reoptimisation of household labour allocations as a result of PWP employment. For this reason, it is difficult to know the extent to which PWP-induced employment substitution (both paid and unpaid) was absorbed within the household, or whether such substitution represented net losses in terms of total household employment activity and as a result, net losses to the household economy. This is an important area for future analysis which is not currently addressed in the PWP literature.

10.5 The Incidence and Impact of Training and Work Experience

The incidence and impact of programme participation on labour market performance are now explored, in terms of whether labour market exposure and training led to improved employment performance, as anticipated, and an exploration of whether PWP employment stimulated any forms of informal and self employment. It is not possible to draw statistically robust conclusions regarding the impact of the training, given the limited data available, but the findings do offer insights into the participants perceptions of the training provided, and together with reported labour market performance of PWP graduates discussed above, these give an indication of likely programme labour market impact. First workers' perceptions of

the training²¹¹ are explored. Overall, 38% of Gundo Lashu and 81% of Zibambebe participants reported that they had received training²¹². The subjects in which training was reported are set out in Table 10.6.

Table 10.6: Training Received by PWP Workers

	Gundo Lashu	Zibambebe
Subject	Workers recalling training in specific areas as a % of those reporting receiving training	
	n=129	n=336
Technical road maintenance/construction	27 (n=35)	99 (n=333)
Supervision	13 (n=17)	15 (n=50)
Entrepreneurship	74 (n=95)	13 (n=44)
Life skills	8 (n=10)	3 (n=10)

Source: Own calculations from PWP Survey 2003.

It is noteworthy that the majority of the Gundo Lashu workers reported no training in areas of technical skills. It is also interesting that despite the very different percentages reporting training in entrepreneurship (74% of Gundo Lashu workers, and 13% of Zibambebe workers), the reported outcome, in terms of engagement in micro-enterprise, is similarly low, in both cases, with only 12-14% of workers reporting increased micro-enterprise activity.

The impact of training on labour market performance was assessed through a direct question in the survey, 'Has this training enabled the worker to find additional wage employment?' Only 6% of formerly employed Gundo Lashu respondents and 4% of Zibambebe respondents replied positively, implying that for 95% of PWP workers the training had not had an impact on labour market performance. In interpreting these findings it is important to note that 63% of the Zibambebe workers who answered the question about work-seeking

²¹¹ On-the-job and any additional training provided were considered together for the purposes of this analysis.

²¹² Interestingly, PWP participants were sometimes uncertain as to whether they had received training or not, and had poor recall of the content, suggesting that the significance ascribed to this input by the participants themselves may have been limited.

reported looking for work while participating in the programme. In the light of this, the low percentage reporting that the PWP training promoted their labour market performance challenges the assumption frequently made in relation to PWPs in South Africa (and elsewhere), that PWP participation and related training will ‘increase their [workers’] capacity to earn an income once they leave the programme’ (President Mbeki, announcing the launch of the EPWP, 11 November 2003).

The primary explanations given by workers for why the training had not enabled them to find employment, were lack of employment opportunities (given as the primary reason by 61% of Gundo Lashu and 82% of Zibambele respondents) and lack of resources for job search (reported by 29% of Gundo Lashu and 7% of Zibambele respondents). The emphasis on lack of employment opportunities represents a realistic analysis of their labour market prospects on the part of the workers, given the levels of unemployment prevalent in rural KwaZulu-Natal and Limpopo. The critical issue is that no skills shortage has been identified for the genre of skills acquired by workers through participation in construction or maintenance-based PWPs; these are not the skills for which a significant unmet demand is apparent.²¹³

Under the SPWP [Special Public Works Programme] Conditions of Good Conduct (South Africa, Department of Labour, 2002a and 2002b) a derogation from the minimum wage was agreed by the Congress of South African Trade Unions (COSATU) for EPWP participants as *quid pro quo* for the training benefits each participant would receive (McCord, 2007a). Accordingly in the Gundo Lashu programme workers were paid 75% of their regular PWP wage while receiving training, on the basis of an imputed value to the participants of the training. However, this was questioned by several respondents, who expressed a preference, both in the survey and the focus groups, to remain working on the PWP, earning a full wage,

²¹³ The government has identified the key areas of skill shortages in the economy as ‘financial service and information and communication technology skills’, which it describes as ‘mid-level skills accessible to matriculants and diplomates’ (PCAS, 2003). It is interesting to note that these are not the skills accruing from participation in PWPs.

rather than participating in training activity which they did not consider valuable, and undergoing what they perceived as a ‘wage deduction’ for doing so.²¹⁴

In recognition of the negligible value of limited skills training, ‘life skills’²¹⁵ training was introduced into the Gundo Lashu programme in place of formal skills training, subsequent to the survey. While PWP participants did not place a significant value on the training provided, it is interesting that, among both groups of workers, the focus group discussions revealed that workers themselves had identified the key areas in which they felt training would be effective, relating in particular to problems of asymmetry in labour market information, expressed as a perception that lack of labour market information and of social networks was problematic in terms of accessing employment opportunities²¹⁶. This suggests that PWP participants would value the provision of labour market information as one component of a training package. However, this would only serve to reduce frictional inefficiencies, rather than increasing the net amount of employment available, unless significant self-employment resulted (see discussion below). Workers also highlighted a need for information and access to microfinance institutions and the formal banking sector, in order to access funds for micro-enterprise, factors which could be addressed through the training component of PWP programmes.

Contracting and Micro-enterprise Development

Another aspect of the perceived beneficial impact of PWPs on labour market performance is that, as a consequence of labour market exposure and skills development, workers may become ‘contractors’, entering into market-based relationships with employers, and moving up the hierarchy of the labour market, once they have their ‘foot on the employment ladder’

²¹⁴ It is interesting to note that the ‘beneficiaries’ of the programme were unable to exercise their consumer power in this instance, in terms of (i) choosing training relevant to their own analysis of their labour market potential, and (ii) selecting who from within the household would be able to maximise returns from training. Several respondents in the survey reported using PWP income to fund training in specific areas where they had identified work opportunities; one had paid for a family member to be trained as a security guard, another had paid for a son to have driving lessons.

²¹⁵ The value of such an intervention is contingent on both the content and quality of the ‘life-skills’ training offered, however, the term is not clearly defined either within the two case study programmes or the broader EPWP of which they are a part.

²¹⁶ The contribution of social capital to labour market performance is discussed in Nattrass (2000).

(Phillips, 2004). In order to explore this assumption, workers were asked whether they had aspirations to become contractors. Fifty-eight percent of Gundo Lashu and 72% of Zibambebe workers stated that they would like to become contractors. However, lack of access to finance and lack of technical knowledge were stated as constraints to the realisation of this ambition. Given the lack of availability of both capital and skills training in contractor development for the workers, their aspirations are unlikely to be met as a result of PWP participation alone. It is also interesting to note that between one-third and one-half of workers did not aspire to move up the labour hierarchy, but preferred to remain as labourers. Both these findings challenge the policy assumption that workplace participation will promote the development of small, medium and micro-enterprises in the construction sector.

The spontaneous development of micro-enterprise activity, as a result of increased availability of cash at the local level, is another outcome often ascribed to the implementation of PWPs. In order to assess the extent of micro-enterprise activity resulting from PWP participation, households were asked whether they had used PWP income to set up or expand small business enterprises. Some 14% of Gundo Lashu households and 12% of Zibambebe households responded positively. The income-generating activities initiated among Gundo Lashu households were primarily focused on small-scale trading (54%), service provision (30%), agricultural production (9%) and household production (7%). Among the Zibambebe households, small-scale trading was also the most common (50%), followed by agricultural production (26%), service provision (12%) and household production (10%). Focus group discussion among the Zibambebe workers revealed that limited markets were a significant constraint to the development of micro-enterprise in their areas, but that the main factor preventing the development of micro-enterprise was the lack of credit and capital, highlighted by 83% and 87% of respondents respectively, followed by lack of business/technical skills, which was seen as the primary constraint by 12% of Gundo Lashu and 6% of Zibambebe respondents. The limited levels of investment in micro-enterprise found in the survey are consistent with findings by Devereux, 2000, who argued that the poor use incremental income first to satisfy basic consumption needs, then to invest in human capital (education and health) and social capital, and only thereafter to invest in income-generating activities. In this way the PWP wage impacts on productive investment

only if it is large enough to cover consumption needs. Devereux found that 'high value transfers are associated with higher propensities to invest in agriculture, social capital (including in financial assistance to relatives), education and acquisition of productive assets' (*ibid.*: 4), while low value transfers, by contrast, are mainly consumed in the form of food and clothing. The survey findings conform with this stepped model of the impact of a wage transfer, indicating increased expenditure on basic consumption needs and human and social capital, but no significant increase in income-generating activity.

The focus group discussions indicated that where a microfinance component (group savings and micro-enterprise training) had been added to the PWP package, subsequent to the implementation of the survey, enthusiasm for micro-enterprise increased significantly, with the workers explaining this in terms of the fact that, while they had considered their individual savings too small to be of use in terms of developing an enterprise, group-level savings would increase the feasibility of the purchase of stock, equipment, etc. While these putative group projects have not yet been realised, and so cannot be evaluated, it is clear that microfinance inputs have the potential to shift the perceptions of workers, in terms of their estimate of the feasibility of investing in viable business ventures. This insight is supported by findings from one NGO-implemented component of the MASAF PWP in Malawi (ILTPWP), which indicated that inputs in areas such as microfinance, credit, savings, group formation, and enterprise development play a critical role in the stimulation of micro-enterprise, which cannot be achieved through PWP wage transfer alone (UK DFID, 2003a).

10.6 Participants' Perceptions of the Constraints to Employment

In both the Gundo Lashu and Zibambele focus groups, workers stated that the experience of working in the PWP, and the skills gained through participation, had not significantly enhanced their employment prospects, due primarily to the high rates of unemployment and lack of demand for labour with the skills they had gained during participation in the PWP. This corroborates the findings outlined above that former PWP workers in Gundo Lashu households had no greater likelihood of employment than other household members, with

only 19% of former PWP employees working at the time of the interview, compared with 17% of Gundo Lashu households members without PWP employment experience.²¹⁷

In terms of the impact of PWP income and experience on household-wide employment performance more generally (mediated through improved information networks, increased resources available for job search, transport, etc., as mooted by Posel *et al.* (2006)), the data do not suggest that the inflow of resources and contacts has had a significant impact. Of the Zibambele households, only 4% had household members who had found work since a household member joined the PWP, and only 8% of households with former Gundo Lashu workers and 6% of households with current Gundo Lashu workers reported that one or more family members had found work since a household member had joined the PWP. It is, however, difficult to draw conclusions from this data, as it is not clear in either case that this employment is a consequence of a household member participating in the programme or the additional household income available for job search.

The classic labour market rigidities articulated by PWP participants as the main constraints to successful labour market participation are explored below. These rigidities are critical as they illustrate the limitations of a PWP's potential to promote successful labour market participation, or graduation, in the context of chronic unemployment; as well as the fact that factors external to the PWP are key in determining its labour market impact.

²¹⁷ If the broad unemployment rate among former Gundo Lashu workers is taken into consideration, this picture becomes increasingly stark, with unemployment rates of 80% among former PWP employees, compared with 65% among non-PWP participants, and a mean rate of 60% among the rural Limpopo population (see Table 10.4). This represents a rate of unemployment among the former PWP employees which is significantly worse than for those who had not participated in the programme, and suggests that, contrary to the objectives ascribed to PWP participation in the policy discourse, employment in a PWP may not lead to a significantly enhanced subsequent employment performance. It is possible, however that the two groups have significantly different labour market characteristics, and hence a direct comparison between the two may not be instructive. This is an area for further analysis of the survey findings.

Reasons for Discouragement

Among labour market participants who had not worked recently, 75% of Gundo Lashu and 65% of Zibambeke household members reported that the main reason for not looking for work was that no jobs were available in their area. This supports the argument for the use of the term ‘discouraged unemployed’ for this group, and suggests that their inclusion in the unemployment statistics is appropriate (see Kingdon and Knight (2000)). Some 25% and 15% respectively gave lack of money to pay for transport to look for work as the main reason, and, in addition, 12% of the Zibambeke group reported having lost hope of finding any kind of work.

Among the Zibambeke PWP participants who were not engaged in work-seeking activity, the dominant reasons given for not seeking employment, were the lack of employment opportunities in the area, ‘family considerations/child care’, and ‘ill-health/disability’ reported by 28%, 24% and 22% of respondents respectively. These findings suggest that some Zibambeke participants may not have the mobility to engage in work-seeking activity away from home, and that domestic responsibilities limit their ability to participate in the labour market. They also indicate that the Zibambeke programme may have included those with physical infirmities which could preclude conventional labour market participation. These health and domestic care constraints on labour market participation may have implications for the likelihood of the progression of PWP participants to employment in the open labour market. It may be that those targeted for PWP participation on the basis of their poverty face health, domestic responsibility or labour constraints which limit their potential participation in the labour market, particularly if employment were not available in the immediate vicinity

Mobility and Domestic Responsibilities.

The issue of labour mobility was explored further in the survey, with the respondents being asked if they sometimes travelled away from home and stayed away from the household to look for employment. Fifty four percent of unemployed Gundo Lashu household members reported that they sometimes did so, compared with only 36% of Zibambeke household members. Among Zibambeke PWP participants only 5% reported travelling in search of

employment. It is likely that this low mobility among Zibambele participants is primarily a consequence of their PWP employment obligations, but given the flexibility offered within the Zibambele programme (in terms of worker substitution) and participants' reported desire to seek additional employment, gender could also be a factor, inasmuch as it implies a set of social and domestic constraints to mobility (93% of the Zibambele participants are female). Todes, quoted in Posel and Casale (2003:466), noted the impact of gender on migration in her study of migration in Newcastle, KwaZulu-Natal:

'It was rare for women to experience the freedom of movement that men did. Women's mobility varied according to their position in the household. Married women could not move at will - their husband's power in this regard was clearly apparent. Unmarried women were freer to move, but this depended on their position and conditions within the household. They were frequently constrained by their roles as care-givers - responsibility for children, the sick and disabled, and for old parents.' (2001:17-18)

In both sets of households a higher percentage of men than women reported travelling in search of work, confirming the findings of Todes (2001) and Posel *et al.* (2004).²¹⁸ For both sexes, travelling in search of work was significantly less frequent among the Zibambele unemployed than the Gundo Lashu, perhaps due to the greater inaccessibility of some remote rural Zibambele programme areas, compared with the Gundo Lashu area.

When asked why they did not travel in search of work, lack of money for job search expenses and lack of work availability again were the dominant responses among the unemployed in both Gundo Lashu and Zibambele samples. The emphasis given to lack of capital for job search is interesting, and it may be that grant or PWP wage income could potentially help to relieve this constraint (see, for example, Samson (2002) and Posel, Fairburn and Lund (2004), who argue that the receipt of social grant contributes to increases in employment search activities). However, the fact that this constraint was identified in households already receiving the PWP wage, indicates that the wage was not sufficient to resolve this problem within the households in these instances.

²¹⁸ Among the Gundo Lashu unemployed, 59% of men travelled in search of employment compared with 50% of women, and in Zibambele households 42% of unemployed men compared with 32% of women.

Among Zibambele PWP participants themselves, however, the pattern differs, with household responsibilities being the main constraint to travelling in search of employment for 63% of women, and 43% of men. Lack of work availability was the main reason given by 22% and 15% of male and female Zibambele participants respectively, and lack of funds for job search 17% and 15% respectively. These responses again indicate that Zibambele participants may be combining domestic responsibilities with the PWP employment, in a way which would be impossible if they were employed in the mainstream labour market. Appreciation of the availability of Zibambele employment in the participants' immediate vicinity was also highlighted in the focus group discussions, and comparisons were made with alternative and less attractive employment opportunities, such as agricultural labour on sugar cane plantations, which might be some distance from the home, and was therefore not accessible to women with infirmities or domestic responsibilities. This consideration was a deliberate component of the Zibambele programme design, which aimed to provide work for those in areas where other work might be inaccessible and which would require no participant to travel more than two kilometres to her work station.²¹⁹

In both cases, financial constraints were the main factor inhibiting job search activity away from the home. If this is considered in relation to the perceived (and real) lack of employment availability, and the recognition that lack of social networks in urban areas limit both access to information about job availability and also help from 'contacts' who might facilitate access to jobs, a factor which emerged from the focus group discussions, it is clear that, even with the cash injection of the PWP wage, job search activity with an uncertain outcome was not seen as a rational use of scarce financial resources in the PWP households. This realistic assessment of labour demand, and of the critical role of social networks in securing employment, corresponds to findings by Nattrass (2000), and suggests that a combination of high levels of unemployment, limited capital and poor access to labour market information serve to influence labour market choices and constrain job search activity.

²¹⁹ J. Mlawu, Policy Director, KwaZulu Natal Department of Transport and Public Works, February, 2004.

10.7 Conclusion

While it is not possible to identify the impact of the programme in terms of unemployment among former PWP workers, due to the lack of baseline data on their prior employment or labour force participation status, the extremely high unemployment level prevailing among former PWP workers challenges the assumption that PWP participation has a significant beneficial impact in terms of subsequent employment performance, in the short to medium term.²²⁰

The Department of Public Works characterises the post-PWP employment options as ‘graduating to employment under normal conditions’ and a choice between ‘moving to a new employer, further education, better equipped job seeking, remaining with the same employer under normal employment conditions, or self-employment’ (Phillips, 2004). The evidence from the survey suggests that workers may rather graduate to ‘unemployment’ under normal conditions, returning back to the *status quo ante* in terms of their labour market performance. The survey findings indicate that unemployment among former Gundo Lashu workers is higher than among household members without PWP experience. The training received by workers appears to have had little impact on employment, largely due to the fact that there is limited demand for semi-skilled construction workers in the programme areas. The majority of workers aspire to move up the labour market hierarchy to develop SMMEs, but recognise that lack of skills and access to capital renders this unlikely. Equally, micro-enterprise activity by workers using wage income as capital is also limited, again largely due to capital constraints and the lack of complementary social development and microfinance inputs. The Zibambebe programme appears unlikely to have created significant local secondary employment, owing to the fact that the workers do not form a concentrated local market, and that the bulk of their wage expenditure is made in the local town as a consequence of the payment modalities of the programme. The Gundo Lashu programme was found to

²²⁰ It should be noted that this finding implies poor labour market performance in the short to medium term, and that frictional unemployment may account for part of this high rate. The longer-term employment implications of PWP employment cannot be inferred from this study, as none of the former PWP employees interviewed had been unemployed for longer than nine months. This finding indicates the importance of medium to long-term tracking of the labour market performance of former PWP workers in order to assess their labour market impact in the long term.

create local demand, both in terms of local food purchasing, and also in terms of creating an additional workplace consumer demand. However, the duration of these benefits was limited to the period of employment. In neither case was significant local economic development evident as a consequence of the wage transfer.

The fact that the survey gave no evidence of improved labour market performance as a consequence of PWP labour market experience or training is not surprising, given the elevated levels of rural unemployment and the limited demand for low- and semi-skilled workers. Likewise, skills training was not seen as a contributor to improved labour market performance by workers. It is not clear that either on-the-job experience or formal training would enable the transfer of sufficient skills to impact significantly on labour market performance, particularly given the limited time investment allocated to training in both programmes, and the limited duration of employment in the Gundo Lashu programme.

The labour market situation facing PWP graduates, revealed by the empirical and qualitative findings set out in this chapter, challenges the argument that participation in the EPWP is a 'stepping stone' to employment in the open labour market (Phillips, 2004). A combination of low demand for labour in programme areas, the mobility constraints implied by household obligations, and limited resources for job search, together suggest that the anticipated exit and graduation scenario for former PWP participants may not be realised. While unemployment rates remain high and the outcome of job search uncertain, the rational response may be to conserve scarce financial resources for immediate priority needs, and possibly continue to engage in *ad hoc* local employment and home production activities, rather than risking them on investment in job search, particularly when the inhibiting effect of lack of social contacts is well understood. In the focus group discussions, participants in Limpopo also reported that the range of employment for which they might migrate was shrinking as a consequence of the introduction of the minimum wage for domestic participants²²¹. Interestingly, a similar shrinkage of employment in the agricultural sector, which was also subject to the introduction of minimum wage legislation at the same time,

²²¹ The minimum wage for domestic workers was introduced in November 2002, see Hertz (2004).

was not noted, although an increase in the casualisation of employment, in order to avoid the wage legislation, was noted.²²²

These findings confirm the argument put forward by Bhorat (2001), highlighting the critical importance of considering labour mobility and the heterogeneity of the labour market characteristics of the unemployed when designing labour market interventions. This is particularly true in the case of PWPs, and the foregoing analysis has indicated that the expectation that PWP employment will lead to enhanced labour market engagement after PWP graduation has been shown to be overly optimistic, as PWP participation does not significantly address the primary constraints to successful job search: lack of employment opportunities, lack of skills to match the jobs that are available, lack of funds for job search, and mobility constraints.

²²² The Gundo Lashu focus groups reported a decrease in contract based agricultural employment by large agribusinesses, in favour of increased daily casual employment.

11 IMPACT

Having reviewed the incidence of the two case study PWPs and their labour market impacts at an individual level in the previous two chapters, the PWP Survey analysis is concluded in this chapter which examines the social protection impact of the programmes. The social protection function of each programme is examined in detail in terms of its impact on a range of poverty indicators, focusing initially on an exploration of the function of the PWP wage in terms of household income poverty, and then looking at what this means at a household level, as indicated by a range of non-income dimensions of poverty, in order to assess the relative social protection performance of the two different types of programmes in the context of chronic poverty.

11.1 Structure of the Chapter

The impact of the PWP wage on income poverty is examined by reviewing the PWP wage transfer in relation to income forgone, and calculating the net value of the PWP wage, which represents the financial benefit accruing to households from PWP participation. This is reviewed in the light of total household income which is calculated on the basis of detailed information on a range of household income sources in the survey. The contribution of the net PWP wage is discussed in relation to total household income and a household subsistence poverty line. Poverty Incidence Curves are calculated for both programmes to estimate and illustrate the income impact of programme participation, following Ravallion (2003).

After this the impact of PWP participation is discussed in detail in terms of a range of non-monetary poverty indicators: i) food consumption, ii) ownership of material and financial assets, iii) human capital in terms of nutrition and access to education, iv) the psychosocial benefits, and v) participants' own assessments of the medium-term welfare impact of programme participation. The discussion of consumption explores the primary uses of the PWP wage, in relation to material and financial asset ownership, and the human capital discussion examines changes in investment in nutrition and education as a consequence of participation in the programme. Finally, psychosocial dimensions of programme

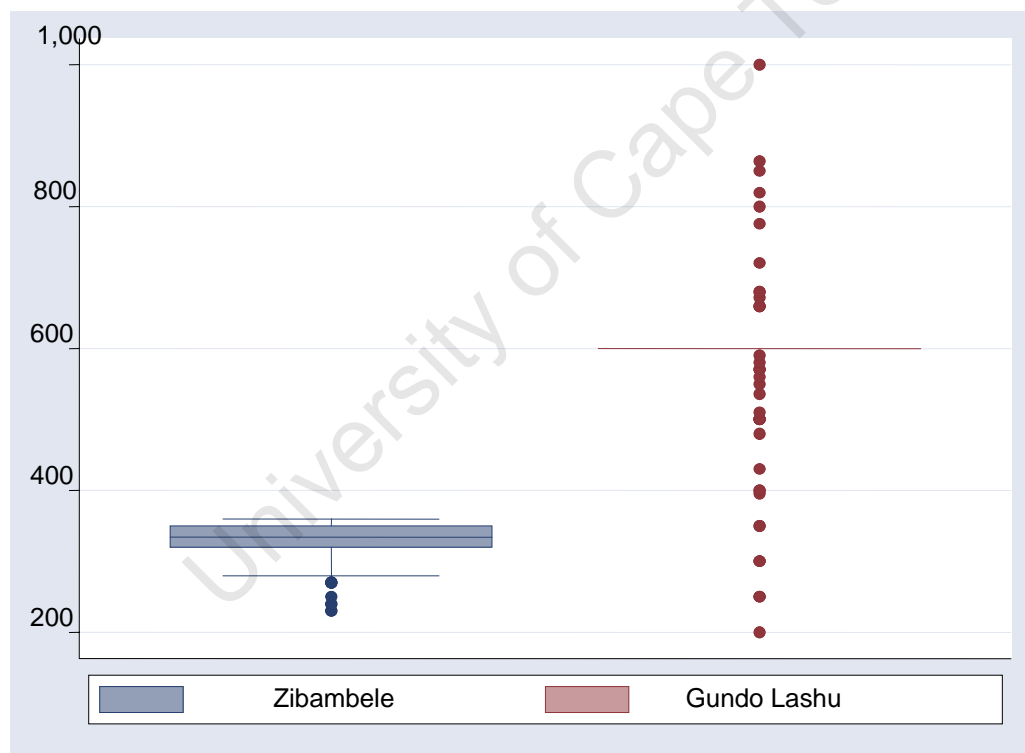
participation are briefly reviewed, highlighting the role of PWP income in facilitating the observance of social norms and customs. In conclusion an appraisal is made of the overall social protection impact of the two programmes and the key policy implications arising.

11.2 The Income Poverty Impact of the Case Study PWPs

The PWP wage

In order to assess the income impact of the PWP intervention, the wage derived from PWP participation is first explored. The distribution of wages in both programmes is illustrated in Figure 11.1.

Figure 11.1: Box Plot of Distribution of Monthly PWP Wages (Rands)



Source: Own calculations using PWP Survey 2003

The mean monthly PWP wage for current Gundo Lashu workers was R579, with a wide distribution of values (s.d. 111) made possible by the task-based payment modality, under which workers were paid per task, and also by the variable length of workers' contracts, with

some working 24 days per month, and others working for shorter periods.²²³ The modal wage reported was R600, which was reported by 67% of the sample. The mean monthly PWP wage for Zibambele workers was R329, with a significantly smaller range (s.d. 22), reflecting the uniform monthly contract. The small variation in the reported Zibambele wage may be due to the net amount available once bank fees of between R15 and R25 have been deducted, since all employees were paid a uniform R334 per month.²²⁴

In order to consider the function of the PWP wage, it is useful first to compare it to the wage income of non-PWP workers, see Table 11.1. The total income of PWP participants earning additional income by engaging in non-PWP employment at the same time as participating in the PWP is also included in the table.

Table 11.1: Monthly Wage Income for PWP and Non-PWP Workers (Rands)

	Mean PWP wage	Range	Mean PWP worker total wage (with additional earnings)	Range	Mean non-PWP worker total wage	Range
Gundo Lashu	579 (n=340)	200-1000	886* (n=24)	750-1172	674 (n=98)	36-3960
Zibambele	330 (n=415)	230-360	492** (n=116)	320-2140	327 (n=99)	40-2000

Source: Own calculations from PWP Survey 2003

Notes: * 7% of Gundo Lashu workers reported additional wage income

** 28% of Zibambele workers reported additional wage income

Since Gundo Lashu employment was ‘full-time’²²⁵ and physically demanding, participation in the programme left little time for additional income-generating activity. This is reflected in the fact that only 7% of current Gundo Lashu workers reported additional wage income

²²³ The Gundo Lashu programme was designed with the objective of each worker completing one task per day in order to attain the daily work rate (R30). In some cases, wage records suggest that workers were able to complete more than one task per day, and hence earn in excess of R30 per day.

²²⁴ Zibambele wages are paid electronically through the formal banking network in order to reduce opportunities for theft and corruption; the loss of between 4% and 7% of the Zibambele wage on bank charges represents a significant cost to PWP workers.

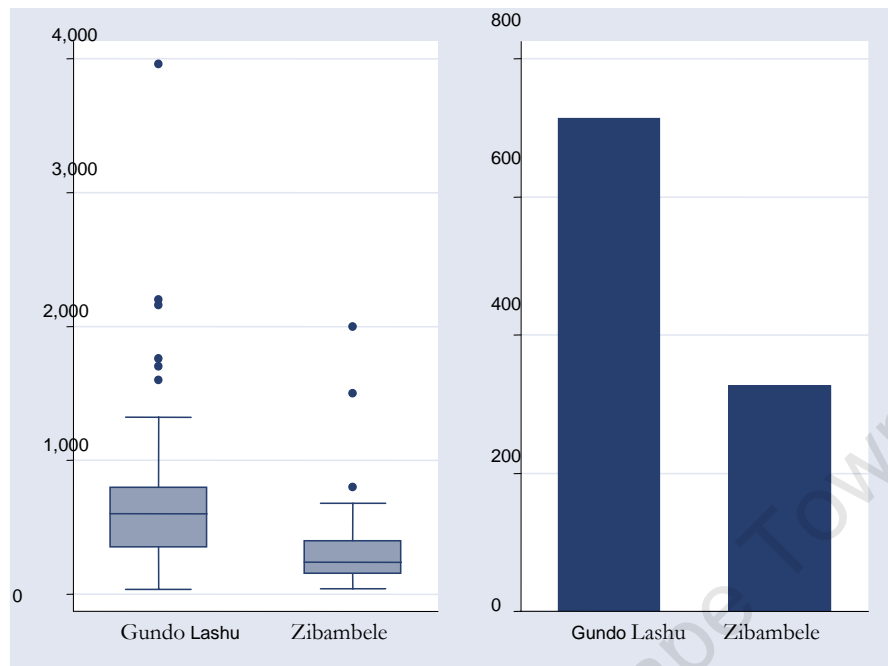
²²⁵ This is based on a norm of one task a day, which will take on average five hours to complete.

from other sources.²²⁶ For these workers, the mean total income from all employment was R886, which was 53% above the mean Gundo Lashu wage. A higher percentage, 28%, of Zibambebe workers reported additional income reflecting the part-time nature of Zibambebe employment. For these workers, the mean monthly wage income was R492; 49% higher than the mean PWP wage.

In the Gundo Lashu programme, workers reliant on the PWP wage alone had a significantly lower wage income than non-PWP workers, while in Zibambebe, the wage income was similar for both PWP and non-PWP workers. PWP workers who had additional wage income reported higher total wage income than non-PWP workers by a margin of 50% in the Gundo Lashu programme, and 30% in the Zibambebe programme.

Figure 11.2 illustrates the distribution of non-PWP worker income in the two programmes. The distribution of incomes in the Gundo Lashu programme is more widely spread, with a mean which is twice that of the Zibambebe programme (R674 compared to R327), indicating that the Zibambebe group is more homogenous with significantly lower wage incomes. This is consistent with the incidence findings in chapter nine, suggesting that the Zibambebe programme may be more focused on a poorer population subgroup than the Gundo Lashu programme.

²²⁶ This issue was highlighted in focus group discussions with PWP workers in Limpopo in December 2003.

Figure 11.2: Distribution and Means of Non-PWP Worker Wage Income (Rands)

Source: Own calculations using PWP Survey 2003.

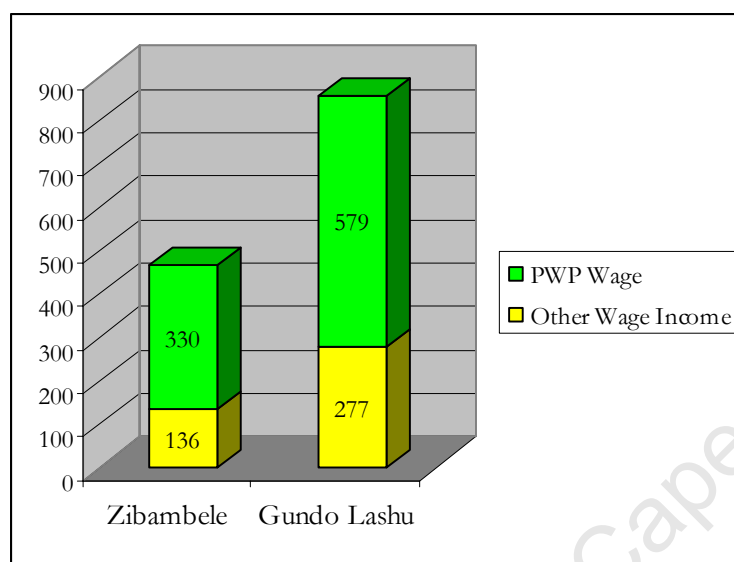
Total Household Wage Income

For households with current Gundo Lashu workers, the mean total monthly household wage income was R856 (s.d. 591). Thirty-nine percent of former Gundo Lashu households reported a wage income,²²⁷ with a mean wage income of R787, ranging from R100 to R2,640. It is interesting to note that the household wage income of households with current Gundo Lashu employment is only 8% higher than for the former Gundo Lashu households reporting wage income. This suggests that, *ceteris paribus*, for those households with access to work, the total monthly wage income may not be significantly altered by PWP participation, possibly implying a more significant degree of labour substitution than was captured elsewhere in the survey. The mean total wage income for Zibambele households, including the PWP wage, is R436 (s.d. 249).

²²⁷ It is assumed that these households are dependent on non-wage income in the form of remittances, transfers, and contributions from within the community.

The contribution of PWP income as a percentage of the total household wage is shown in Figure 11.3.

Figure 11.3: PWP Wage as Contribution to Total Monthly Household Wage Income (Rands)



Source: Own calculations from PWP Survey 2003.

The PWP wage represented 71% of total household wage income in Zibambele households, and 68% in Gundo Lashu households. It may be instructive to make an adjustment to compensate for the anticipated under-reporting of wage income in household surveys in order not to overestimate the value of the PWP wage as a percentage of total wage income (see discussion in Deaton (2003)). There is no formal estimate of the level of income under-reporting in South Africa, but drawing from the 1996 census and the 2000 Income and Expenditure Survey, Simkins has proposed that the actual income may be approximated by inflating reported income by a factor of 1.6²²⁸. If this inflator is adopted for the non-PWP wages only, the PWP wage forms 43% and 58% of the total wage income for the Gundo Lashu and Zibambele programmes respectively, still a highly significant proportion of overall wage income.

²²⁸ Simkins (2003) cited in Meth (2004a)

Income Forgone

In order to assess the wage impact of participation in a PWP in the context of the dynamic processes of labour substitution which occur at household level in response to PWP employment, it is necessary to take into account wages forgone (Van de Walle, *op cit*). This consideration has been omitted from many previous evaluations of the impact of PWP (see discussion in Devereux and Solomon (2006), and chapter four of this thesis). This omission warrants serious criticism of the literature of this genre of social protection interventions. Wages forgone represent a directly measurable private opportunity cost for programme participation,²²⁹ which is particularly relevant when considering the net labour market and income impacts of PWPs as a component of social protection.²³⁰

Ideally, the pre-PWP household wage income should be reviewed in order to calculate income forgone. In the absence of a baseline study, this information has to be inferred from the recall data included in the survey. Such data are not ideal as i) they are subject to recall error and ii) they do not allow the complexity of intra-household labour shifts arising from PWP employment to be modelled. Notwithstanding these limitations, this process is attempted, and critically discussed below.

An important caveat to the forthcoming analysis is the fact that it is possible that the degree of labour market distortion in the form of the substitution of one form of employment for another, may be greater than indicated by the survey findings, as many respondents might not consider 'piece work' or casual work to be 'work' and worthy of reporting (as argued by Adato *et al.* (2004)). Also, the findings could potentially be biased by a concern among respondents that admitting to prior work participation might lead to exclusion from future PWP employment. Focus group work confirmed that these factors were likely to result in the under-reporting of work forgone. Given this potential bias, the estimates in this chapter

²²⁹ As discussed in chapter five it is important to note that income forgone is not the only private opportunity cost of programme participation, (see for example discussion of the variety of informal rents paid in order to participate in the MEGS in India, Pellisery (2008), and Sharp *et al.* (2006)) but it is the principal cost, and one which is most readily measurable through survey analysis.

²³⁰ Datt and Ravallion (1994) also suggest the possibility of examining utility forgone, assessed in terms of time allocations. However, the income approach alone is used in this analysis.

are at the upper limits of the net financial value of PWP employment, representing the maximum possible benefit, and as a result the most optimistic scenario of the net financial impact of the programme.

In addition the question of household level PWP-induced labour substitution and reoptimisation raised in the previous chapter has a bearing on the accuracy of the analysis of income forgone in this chapter. Given the limitations of the data available, it is only possible to examine income forgone at an individual level, and so this chapter does not take account of whether the activities forgone are adopted by other household members, which would mean that income forgone did not represent a net income loss to the household, but only to the PWP participant. This analytical gap relating to the relationship between household level labour availability, intra-household labour substitution and the likely net gains from PWP participation is indicative of a broader research lacuna in this area.

Labour Market Substitution

The number of PWP participants reporting reducing or giving up alternative activities in order to participate in the PWP programme was high, with 81% of all Gundo Lashu and 72% of Zibambele workers reporting giving up some form of work.²³¹ It is interesting to review the kind of work given up, both paid and unpaid, in order to gain insights into the nature of the changes in household labour allocations taking place. The results are set out in Table 11.2.

²³¹ The response rate to the question regarding 'work given up' was 78% among Gundo Lashu workers, and 88% among Zibambele workers. This includes unpaid domestic work. Not all those who reported reduced work activity reported a monetary value for this work.

Table 11.2: Categories of Work Forgone

	Gundo Lashu (n=275)	Zibambebe (n=299)
	% of workers answering yes to each category	
Regular wage employment	5.8 (n=16)	0 (n=0)
Casual wage labour	15.9 (n=44)	24.0 (n=72)
Subsistence labour	10.0 (n=28)	21.0 (n=63)
Non-farm activity	12.8 (n=35)	13.8 (n=41)
Domestic activity	34.6 (n=95)	25.1 (n=75)

Source: Own calculations from PWP Survey 2003.

Note: Numbers do not add up to 100% as categories were not exclusive.

Chi-square tests indicate that there was a significant difference in the work forgone between the two groups in every category, with the exception of except non-farm activity.²³² Among Gundo Lashu workers reporting having given up alternative work, one-third reported giving up domestic activity, compared with between 10% and 16% reporting giving up casual wage labour, non-farm activity and subsistence and only 6% giving up regular wage employment. The pattern was different for the Zibambebe workers, for whom domestic and casual wage labour and subsistence labour were the dominant categories of work forgone (between 21% and 25%), with no workers reporting giving up regular wage employment in favour of PWP participation. The relatively low total monthly remuneration for Zibambebe employment would not compensate for the loss of regular wage employment, and it is unlikely that if a Zibambebe worker had had regular wage employment, this would have been given up for Zibambebe employment.²³³

Among Gundo Lashu workers only a small percentage of either sex reported giving up regular wage labour, reflecting the limited access to regular wage employment in the area. For men the most frequent kind of work forgone was casual wage labour, with 27% of those

²³² For casual wage labour $\chi^2=5.80$, at significance level 0.05, $df=1$, for subsistence labour $\chi^2=12.73$, for non-farm activity $\chi^2=0.12$, and for domestic activity $\chi^2=6.15$.

²³³ It is also unlikely that a worker with such employment would have been selected by the community for inclusion in the programme.

who gave up work reporting this as an activity forgone, while only 6% of women reported work forgone in this area. For women, the most frequent area of work forgone was non-remunerated domestic work, which 50% mentioned, compared with only 17% of men. The second most important category for women was non-farm income-generating activity, which was given up by 17% of women, compared with only 8% of men. Chi-square tests indicate a significantly gendered difference in work forgone by Gundo Lashu workers in the categories of casual wage labour, engagement in non-farm activities and domestic work.²³⁴ This is likely to reflect the gendered allocation of labour within the households of participating workers. A statistical analysis of the gendered division of type of work given up is not possible in the case of the Zibambebe workers, owing to the small number of males participating in the programme (7%).

The survey findings suggest that significant labour market substitution occurred as a consequence of the introduction of the PWP in both groups. In the focus group discussions, participants stated that many Gundo Lashu workers had worked on an informal basis immediately prior to participation in the programme, confirming the survey findings. Focus group discussion indicated that this substitution is related to the extremely low wage levels prevailing in the area, in both the local informal sector and the informalised component of the agricultural sector,²³⁵ and the relative ease with which workers can move in and out of low-paid informal sector work.

Among the Zibambebe PWP workers, 31% reported having given up alternative paid work activities (regular or casual labour or non-farm activities, defined in the survey as ‘things to sell, selling things, providing services, etc.’), compared to 36% of the Gundo Lashu workers, a difference which is not statistically significant.²³⁶ The similarity between the Gundo Lashu and Zibambebe workers in terms of the percentage of workers reporting substitution is

²³⁴ $\chi^2=25.00$, $\chi^2=6.22$ and $\chi^2=37.65$ respectively, at the 0.05 significance level, with $df=1$.

²³⁵ The introduction of the minimum wage in agriculture was perceived as having little impact on the highly casualised lower end of the agricultural sector, in which workers are recruited and paid daily on a task basis, with no employment registration or documentation of their employment. Wages in this sector were reported to be as low as R6 per day.

²³⁶ $\chi^2=1.93$, $df=1$.

surprising, given the differential in labour market characteristics of the two groups, although the amount of reported income forgone is significantly different, at R380 and R158 respectively.²³⁷ Since Zibambele employment is part-time and Gundo Lashu employment is full-time, it would have been predicted that a larger amount of work would be forgone among the Gundo Lashu workers, who would find it harder to maintain concurrent alternative employment. One explanation for the similarity in reported work forgone may be the more limited work opportunities available to Zibambele workers, which would mean that there were fewer work opportunities for them to forgo. This explanation was implied in the focus group discussions which revealed extremely limited employment opportunities in both the formal and informal sectors for Zibambele workers, particularly in areas where access to agricultural employment or raw materials for domestic production (materials such as grass and clay) was limited. Only informal short-term employment, frequently paid in-kind, was available within many Zibambele communities, and access to wage labour was extremely limited and ad hoc, confirming Muller's characterisation of employment in the South African informal sector as 'survivalist, offering poor job security and yielding low returns' (Muller, 2003:1). In this context, security of employment was perceived as the core benefit of participation in Zibambele. Workers argued that they would give up or refuse higher paid temporary employment in favour of PWP employment, if engaging in such temporary work entailed giving up the security offered by PWP participation.²³⁸

Where Income Forgone Exceeds the PWP Wage

For a small proportion of the workers the reported value for income forgone was greater than the value of the PWP wage (2.7% of Gundo Lashu workers, and 1.4% of Zibambele workers²³⁹). There is a need to look at the rationale for this behaviour separately from that of the workers for whom PWP participation represented a net gain in income. While the number of workers reporting this is low, it may indicate a preference for PWP work which was perceived as higher quality work than the work forgone. The focus group discussions in

²³⁷ Two-sample t-test, df=158, t=7.98, p = 0.000, using current Gundo Lashu reported income forgone.

²³⁸ Focus group discussions, Eshowe and Mapumulo, KwaZulu-Natal, February 2004.

²³⁹ n= 9 in the Gundo Lashu and n= 6 in the Zibambele programme.

both case studies revealed that the work available in the area tended to be sporadic and irregular, varying in terms of availability and duration of employment, as well as remuneration and certainty of being paid for work performed.²⁴⁰ For these reasons, forgoing uncertain, but sometimes higher paid, work in favour of lower paid employment of potentially several weeks, months, or, in the case of the Zibambele programme, ongoing duration was a rational deployment of labour.²⁴¹ This issue is consistent with the ‘quality of employment’ argument outlined above, and focus group discussions suggested that the incidence of income forgone exceeding PWP income may be more widespread in reality than was captured in the survey, since a high premium was placed on the value of extended or permanent employment over higher wages for a temporary period.

The Quality of Work

The workers argued that their labour market decisions were not driven exclusively by the goal of maximising the current wage, thereby challenging the assumption that labour behaviour is primarily a function of the wage rate, but also by consideration of the security of their income stream over time, and the quality of the employment. The fact that quality and duration of employment play such a key role in informing labour behaviour, offers a critical insight into the household labour dynamics informing PWP participation. In the focus group discussions, workers highlighted the high value they attributed to the quality of the employment, in terms of the stability of the income flows offered, over income. This was particularly the case among the Zibambele workers who defined the attributes they valued in the PWP employment as i) the regular wage, ii) a stable and predictable wage level, iii) the permanent nature of employment provided, iv), the flexibility of working hours (enabling PWP participation to be combined with other household responsibilities or work opportunities, thereby allowing the labour-constrained household which might not be able to participate in full-time employment, or employment with set hours of participation, to

²⁴⁰ The difficulty in ensuring payment for informal work carried out within the community was raised as a concern among some of the PWP workers.

²⁴¹ Since this response was not anticipated in the survey design, the issue was not explored further in the survey, but only in the supporting qualitative focus group work.

benefit), and v) the acceptance of labour substitution from within the household. This latter factor is particularly important as it sanctions the reallocation of the PWP job within the household in the case of sickness or death on the part of the nominated worker, reinforcing the stability of the benefit even at times of household stress. This concession also enables PWP workers to take up occasional full time temporary work outside the PWP, if the opportunity arises, without sacrificing the security offered by PWP participation.²⁴² These unusual design elements mean that the programme maximised the potential for participation by labour-constrained households, and enabled poor households to optimise their wage income through participation in locally available transient employment opportunities through intra-household labour reallocation. Recognising this, workers were keen to maintain their employment in the scheme rather than engage in alternative, less-secure employment with higher remuneration.

These findings are consistent with the arguments of Devereux (2000) and Dev (1995), that predictability of income flows may be more important than the net amount of the transfer, with a stable income flow enabling improved household-level financial planning (consumption smoothing through saving, borrowing, etc.), which is denied to poor households for whom income is erratic (as described by Adato *et al.* (2004)). Drawing on experience from the MEGS, Dev argued that it is the stabilisation effect rather than the immediate transfer which has the most significant impact on sustained poverty reduction, stating that ‘reducing fluctuations in income can be as important to the poor as raising average incomes’ and that ‘reduction in income fluctuations can prevent acute distress to the poor and preclude the need for costly forms of adjustment, such as selling productive assets’ (Dev, 1995:126, 136). He went on to assert that ‘even if the increase in income is not very large compared with the aggregate need, the existence of any form of income or employment insurance could be quite significant’. The implication of this argument is that the insurance function of a PWP is critical in terms of promoting a sustained social protection outcome. However, a PWP can only provide this insurance function if it can

²⁴² The example offered by Zibambebe workers was temporary work cutting sugar cane.

guarantee employment on a sustained basis to all who seek it, in the form of a universal type B programme. This represents a significant challenge in countries facing the fiscal, administrative and technical constraints which characterise most MIC and LICs²⁴³.

The findings highlight the critical importance of the quality of PWP employment, and the fact that this in itself has a value to programme participants, and influences their labour market behaviour, independently of the monetary value of programme participation. It is important that these factors are taken into account in the PWP debate in order to inform appropriate programme selection and design.

The Value of Income Forgone

The actual values of income forgone are reviewed below as the first step in assessing the net value of the PWP wage. Among the Gundo Lashu sample, the value of income forgone was significantly different between current and former workers,²⁴⁴ and the mean reported value of income forgone was R380 for current (n=45), and R289 for former workers (n=39) (s.d. 240 in both cases). This represents 66% and 50% of reported PWP income respectively. The figure for those previously employed is likely to be less accurate due to poor recall. Among current workers the figures are R453 (s.d.265) for men, and R311 (s.d.198) for women. In the Zibambebe programme, the mean value of income forgone was R157 (n=115, s.d. 113), which represents 48% of reported PWP income, with figures of R123 (s.d.68) for men, and R158 (s.d.115) for women. The distribution of income forgone in the two programmes is illustrated in Figure 11.4.

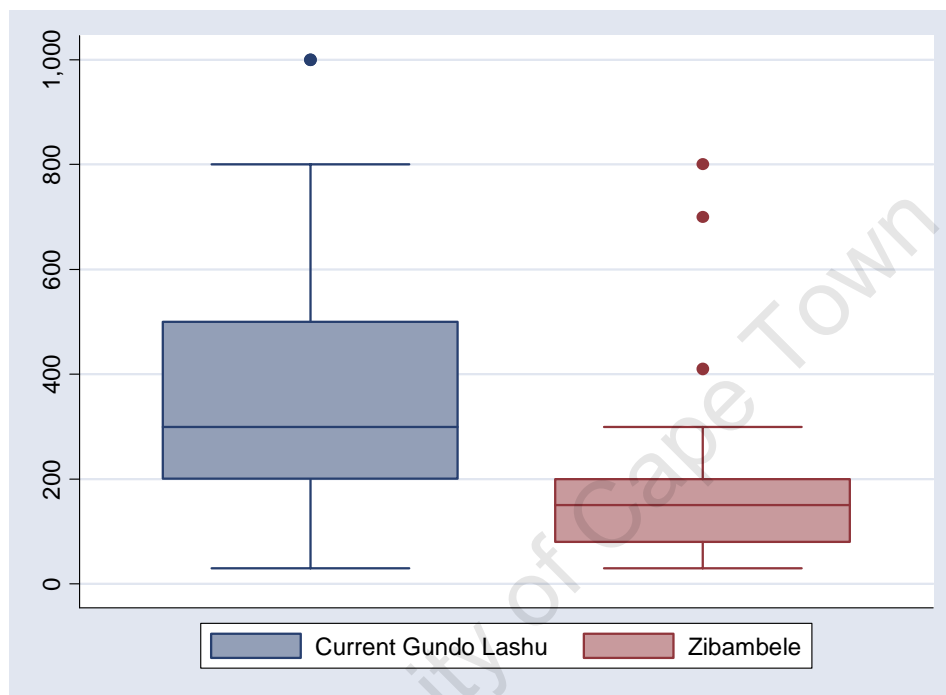
If instances where the value income forgone exceeds the value of the PWP wage are excluded from the analysis, the value of current Gundo Lashu income forgone falls

²⁴³ The problematic nature of PWP as a mass social protection instrument is explained by Barr, who asserts that 'Private insurance requires, first, that the probability of the insured event for any individual is independent of that for anyone else. This condition is necessary because insurance depends on the existence in a given period of a predicable number of winners and losers. If, in the extreme, individual probabilities are completely linked, then if one person suffers a loss so does everyone else. Thus actuarial insurance can cope with individual shocks but not with common or systemic shock' (Barr, 1998:114).

²⁴⁴ Two-sample t-test, df=82, t=1.74, p = 0.043.

significantly from R380 to R284 (s.d.141) and Zibambele income forgone falls from R157 to R140 (s.d.75).

Figure 11.4: Box Plot of the Distribution of Income Forgone (Rands)



Source: Own calculations from PWP Survey 2003.

There is a significant gender difference in the mean monthly value of income forgone in both programmes.²⁴⁵ Among current male Gundo Lashu for whom PWP income exceeded income forgone, the mean monthly value of employment forgone was R326 (s.d. 155), while for female workers the figure was significantly lower at R250 (s.d.121), 77% of the male

²⁴⁵ It is interesting to note that 27% of the male sample had reported income forgone which was greater than PWP wage in this instance, compared to only 13% of the female sample, although the sample sizes are small (n=22 and n=23 respectively), so this difference may not be statistically robust.

value. Among male Zibambele workers the value was R145 (s.d.89)²⁴⁶ while for female workers the corresponding figure was R140 (s.d.74), 97% of the male figure.

Net PWP Income Value

In the light of the reported income forgone discussed above, estimates can be made of the net income gain to households from PWP participation by subtracting income forgone from the reported PWP wage. From this, a *net financial benefit ratio* can be derived (McCord, 2003), which indicates the percentage of the value of the gross PWP wage transfer which constitutes additional household income²⁴⁷. This ratio is calculated for each of the programmes below.

The mean net income gain from participation in the PWP for current Gundo Lashu workers reporting having given up work, and for whom income forgone did not exceed the PWP wage, was R292 (s.d.136, n=32), 50% of the mean PWP wage of R579, implying a mean net financial benefit ratio (NFBR) for current Gundo Lashu workers of 0.50.²⁴⁸ Gross and net monthly PWP income are illustrated in Figure 11.5 below.

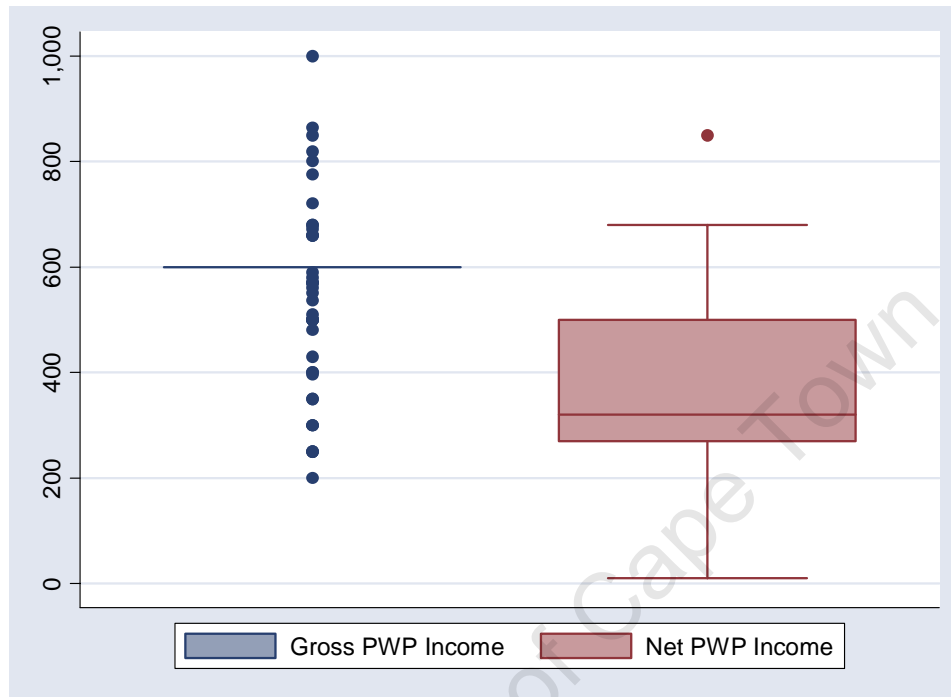
Calculated by gender, the mean net income gain for men was R242, and for women R330, resulting in a NFBR of 0.42 for men and 0.57 for women, suggesting that female participants may have benefited more in direct financial terms from participation in the programme, largely due to the lower values of income forgone. It is important to treat this finding with caution, however, because of the small numbers of data points (n=14 for men and n=18 for women).

²⁴⁶ It should be noted that n=8 for this group, with men constituting only 7% of the total Zibambele workforce.

²⁴⁷ This ratio is calculated on the basis of the simplifying assumption that intra-household labour reallocation did not take place, such that another household member took up the activities forgone. This simplifying assumption has been adopted throughout this chapter due to the lack of data on intra-household labour reallocations. It should, however, be noted that this caveat applies to all discussion of income forgone and total household income in the chapter, and could potentially lead to an understatement of the net PWP income impact, if significant levels of intra-household reoptimisation of labour allocation were taking place.

²⁴⁸ The household-level processes resulting in levels of income forgone which exceed PWP income are not discussed further in this report.

Figure 11.5: Gross PWP Income for Current Gundo Lashu Workers and Net PWP Income for Workers Reporting Income Forgone* (Rands)

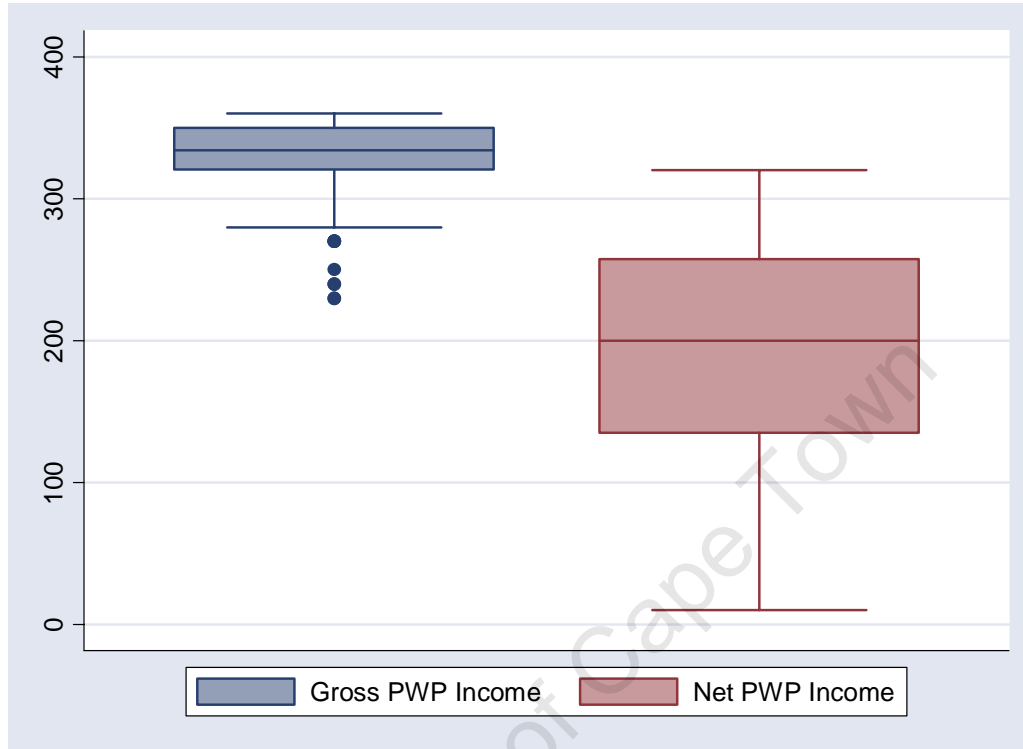


Source: Own calculations from PWP Survey 2003.

Note: * n=45

A similar process was followed to calculate the mean net income gain and NFBR from participation in the PWP for the Zibambele participants. On this basis, the gross income gain from PWP participation was R330 compared to a mean net income gain of R190 (s.d.80, n=108), indicating a NFBR of 0.58. The mean net monthly income gain for men was R199, and for women R190, resulting in NFBR of 0.60 for men and 0.58 for women, illustrated in Figure 11.6 below.

Figure 11.6: Gross PWP Income for Zibambele Workers and Net PWP Income for Workers Reporting Income Forgone* (Rands)



Source: Own calculations from PWP Survey 2003.

Note: *n=108

On the basis of reported employment forgone, the Gundo Lashu net financial benefit ratio is 0.50, and the Zibambele 0.58, implying a slightly greater net income gain in the Zibambele programme. However, these ratios are only meaningful for those workers reporting income forgone. In order to calculate the programme-wide net financial benefit ratio, the fact that only one third of programme participants reported income forgone needs to be taken into account (28% of Zibambele and 33% of Gundo Lashu workers reported forgoing employment with monetary remuneration, and gave values). For the workers who reported no income forgone, the net income gain was the full amount of the transfer, and the net financial benefit ratio would be unity; this would apply in the case of 89 of the current Gundo Lashu workers, and 299 of the Zibambele workers.

Combining the analysis for those reporting income forgone, and those not reporting it would result in an overall programme wide mean net income benefit of R507 (compared to from R579 gross benefit) in the case of current Gundo Lashu workers, with a net financial benefit ratio of 0.88. In the case of the Zibambebe programme this would result in a mean net income benefit of R294 for each worker (compared to a R330 gross benefit), representing a net financial benefit ratio of 0.89. However, as discussed above, the degree of labour market substitution taking place may be greater than the figures reported in the survey imply, and hence these calculations may underestimate the extent of income forgone, exaggerating the NFBR of these projects. Hence the figures of 0.88 and 0.89 can be taken to represent a best case scenario or upper limit of the actual net financial benefit ratios prevailing in the two programmes respectively, while the pattern of income forgone reported by one third of the workers can be used to set lower limits of 0.50 and 0.58 respectively. From this analysis it can be concluded that the net benefit ratio falls between 0.50 and 0.88 for the Gundo Lashu programme, and between 0.58 and 0.89 for the Zibambebe programme. If however, significant intra-household labour reallocation was taking place to accommodate work forgone by the PWP participant, the extent of income forgone at a household level would be lower than the NFBR range calculated above would suggest

11.3 Total Household Income

Having examined the net wage impact of PWP participation, it is now necessary to review this in the context of total household income. In addition to employment-derived income, state and private transfers play a critical role in household welfare. These include state grants, transfers and social insurance, and a range of community or family-based transfers such as remittances, loans and gifts within the community (vertical transfers), as well as transfers marking events such as marriage or the birth of a child. These additional forms of household income are explored below.

State Social Grants and Insurance

In order to capture the value of state transfers received in the PWP households, each household was asked what state social grants and insurances were received by household

members. In this chapter the aggregate value of state grants and insurances is calculated as one component of total household income.

The transfers accruing to the largest number of household members were the child support grant and state old-age pension. All other state grants and insurances received by a negligible percentage of the sample²⁴⁹. The incidence of social insurance was extremely limited, with Unemployment Insurance Fund (UIF) payments reported by only one household in the whole survey, confirming the limited penetration of this contributory insurance; the only formal social protection instrument designed to support the working age unemployed in South Africa.

In total 67% of Gundo Lashu households and 37% of Zibambele households received some form of state transfers. The mean value of state transfers to Gundo Lashu households was R620, while the mean value for Zibambele households was significantly lower at R416.

Private Transfers

Several forms of private transfers were captured in the survey, although in very small numbers compared to the reported incidence of state grant receipt. While private transfers play a role in household survival strategies and contribute to the diversified income base of the poor (Habib and Maharaj, 2007), they are rarely captured in conventional surveys. Those with the highest incidence were private maintenance grants for children or spouses,²⁵⁰ but workplace pensions and retirement benefits,²⁵¹ bride price (*lobola*) and compensation for illegitimate children, injury or theft were also reported. The relatively low coverage of workplace pensions would be expected given the labour market segment from which most of the PWP workers were drawn, the reported incidence of the other major forms of social redistribution, such as *lobola*, is low given the demographics of the sample, and it is likely that

²⁴⁹ 169 child support grants and 98 old-age pensions were reported in the Gundo Lashu sample, and 161 and 38 respectively in the Zibambele sample. A detailed discussion of social grant and insurance receipt among PWP households, including take up rates, is provided in chapter nine.

²⁵⁰ The numbers of private maintenance grants reported were n=21 in Gundo Lashu and n=13 in Zibambele households, representing receipt by 8% and 3% of households respectively.

²⁵¹ The number of reported pensions and retirement benefits were n=6 for Gundo Lashu and n=5 in Zibambele households (2% and 1% of households respectively).

there was significant under-reporting of this form of social transfer. It is interesting to note the high value of the transfers in the cases where figures were reported, for example, the Zibambele transfers included compensation payments from the fathers of illegitimate children, three in the form of cows, valued at between R700 and R3,000, and others in the form of cash payments of R1,000, R1,700 and R2,000, while the Gundo Lashu sample included a *lobola* payment of R800. The mean annual values given for workplace pensions/benefits were R670 in the case of Gundo Lashu and R1,772 in the case of Zibambele. It is important to note the significance of the value of both workplace insurances and social redistributive processes, in the context of the household monthly wage income levels of only R466 in the case of Zibambele, and R858 in the case of Gundo Lashu.

Remittances

Remittance income was included in the survey in order to accommodate as many of the diverse sources of household income prevalent in South Africa as possible. This information is often omitted in current national household survey work, and for this reason there is little direct comparative data (see Posel and Casale (2003) for a full discussion of the constraints to analysis of remittance behaviour in current household survey instruments). Even when included in a survey, however, remittance income may frequently be under-reported due to i) problems of recall and ii) the inclusion of goods in-kind, which may be difficult to remember and to value in monetary terms, and may as a consequence lead to an undervaluing of the contribution of remittances to household income.

Notwithstanding these concerns, 28% of Gundo Lashu households and 12% of Zibambele households reported remittance income from household members. These figures are consistent with the percentage of households reporting migrant workers, which in the case of Gundo Lashu is 28%, and in the case of Zibambele, 7%. Of the Gundo Lashu households reporting remittance income, 44% (n=33) gave details of the amounts remitted over the prior twelve-month period. The mean value of remittances was R3,041, ranging from R250 to R12,000. For the Zibambele households reporting remittance income 39% (n=19) gave values; the mean annual value of these remittances was R615, ranging from R40

to R1,500. The latter figures are considerably less widely distributed than the Gundo Lashu figures, indicating a more homogenous population with fewer outliers.

Community Contributions

In order to explore the issue of horizontal intra-community transfers, and complete the review of potential sources of household income, households were asked whether they were in receipt of contributions in the form of financial or non-financial gifts from non-household members of their community (community contributions).²⁵² This information is not normally collected in national surveys in South Africa, and is interesting because it sheds light on households' coping strategies under conditions of extremely high unemployment and impoverishment.

Among current Gundo Lashu households, only 7% reported receiving community contributions, while the figure was 20% among households with former Gundo Lashu workers. This suggests that household receipts from community members may be lower during the periods of PWP employment. The mean monthly value of these contributions for households with current workers was R123 per month (ranging between R200 and R4,000 annually). Among households with former workers the mean monthly value was R55 (ranging from R50 to R2,400 annually). Among former Gundo Lashu households the mean value of community contributions was 45% of the value for those with current PWP employment. This suggests that a higher proportion of former than current Gundo Lashu households received transfers from the community, but that the value of the transfer was significantly less, i.e. households without current PWP employment report significantly lower levels of community support in absolute cash terms, but a greater percentage receive assistance. There are many possible explanations for this pattern, which may be indicative of different types of horizontal transfer processes within the community, contingent on regular wage income and repayment potential, or differential characteristics of households retaining PWP employment over a longer period. This is an area for further research; it will not,

²⁵² This question was answered by 255 out of a total of 263 Gundo Lashu households (97%), and 408 out of 413 Zibambele households (98%).

however, be explored further in this thesis. Twenty-eight percent of Zibambele households received community contributions, indicating a significantly greater reliance among Zibambele than Gundo Lashu households on community support, even during programme participation. However, while a higher percentage of Zibambele households received help from the community, the level of assistance was significantly lower than among Gundo Lashu households, with a mean monthly value of R25, ranging from R10 to R3,848 per annum. This may be linked to the fact that, even when participating in the programme, almost all Zibambele workers remained under the poverty line (see McCord, 2004a), and hence in need of ongoing support from the community.

The main benefactors of both groups were neighbours and relatives who were not members of the household, which suggests that the majority of horizontal transfers within the community were based on social networks and flow through relatives and neighbours rather than other formal institutions. The survey findings are consistent with findings by Moller (1992) and Hofmeyr (1985) cited in Nattrass (2000), which highlight the critical role of gifts from relatives and neighbours in the survival strategy of the poorest.

PWP households also played a role as donors of community contributions, with 24% of Gundo Lashu households and 28% of Zibambele households reporting giving financial or material support to non-household members²⁵³. The mean monthly amount given by Gundo Lashu households was R44, and by Zibambele households R18, and the main recipients of this assistance were relatives living outside the household and neighbours (see appendix 11).

These findings suggest that significant horizontal redistribution is taking place, with households focusing their gifts on relatives and neighbours. The Zibambele households focused more exclusively on assisting neighbours,²⁵⁴ reflecting focus group discussions in

²⁵³ Interestingly, the data indicate that PWP employment status does not make a significant difference to the number of Gundo Lashu households acting as donors, with 23% of households with current PWP employment making contributions compared with 28% of former PWP households.

²⁵⁴ Chi-square tests indicated that there was a significant difference between the two groups in terms of the support offered to relatives outside the household, and support to neighbours ($\chi^2=24.378$, $p=0.000$, and $\chi^2=11.6371$, $p=0.001$ respectively, $df=1$).

KwaZulu-Natal where former workers stated that they perceived it as being both their responsibility to assist other community members since they were receiving PWP income, and also a matter of social pride that they were now able to give support to other community members, rather than being in the position of mendicants themselves, as they had been prior to PWP employment. These findings suggest the operation of community-level mutual insurance against risk of unemployment; during periods of unemployment and financial hardship the Zibambele workers received support from the community, and when they had access to employment they reciprocated with gifts to others in the community, both those in need and those who had assisted them in their times of hardship.

Total Household Transfers Value

For households reporting transfers, the total mean monthly value of state and private transfers to Gundo Lashu households, was R645, ranging from R100 to R2,360, and to Zibambele households R469, ranging from R50 to R5,000. In both cases the data were skewed by a small number of high private transfers (private maintenance, pensions and other transfers).

Total Household Income

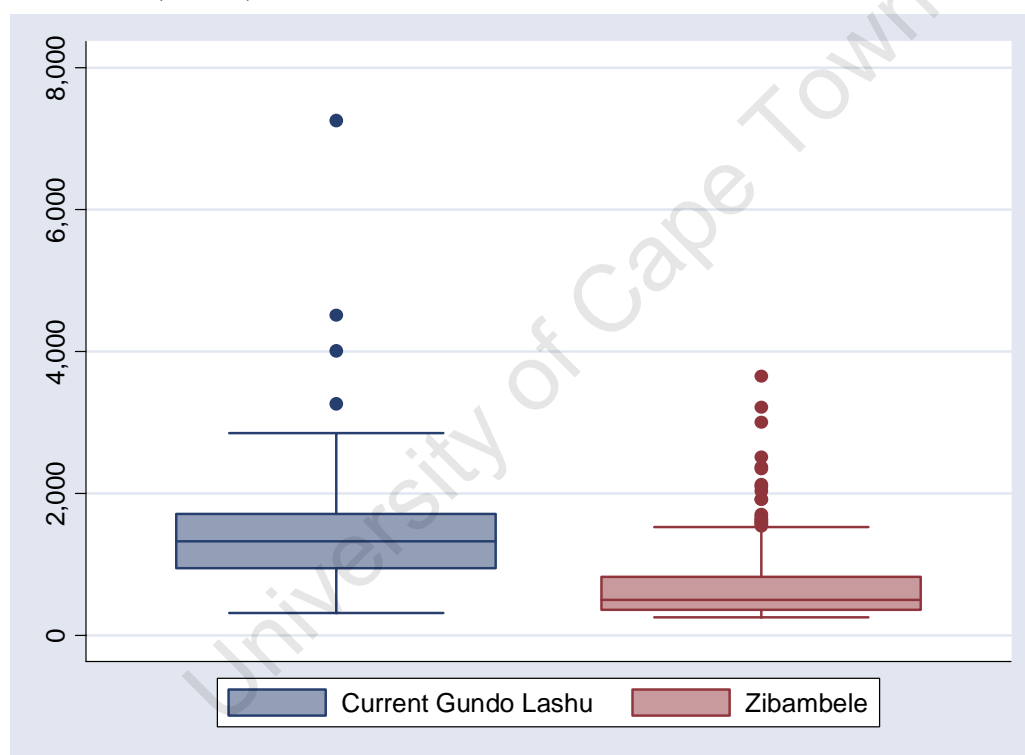
Total household income was calculated by aggregating income from all the sources discussed above; wage, the net PWP wage,²⁵⁵ state social grants and insurances, private transfers, remittances and community contributions, including imputed values where incomes were reported but values not provided, based on the adoption of the mean value for that form of income. Among current Gundo Lashu households, mean total monthly income was R1,467 (s.d. 895). Among the 149 former Gundo Lashu households, 8% (n=12) reported no income of any kind, these households have been excluded from the ensuing analysis.²⁵⁶ The

²⁵⁵ The net PWP wage used here is based on reported PWP wage, less reported value of income forgone.

²⁵⁶ The existence of 8% of households without any form of income suggests that not all forms of income or income in-kind may be being picked up in the survey. The lack of income data is thought to represent a failure to disclose rather than a total lack of either earned income, transfers or remittances, in cash or kind, since while it is possible that the households were surviving solely on household domestic production, this is unlikely, given that the survey was conducted during the drought period of winter 2003 in Limpopo, and there was very little agricultural activity or agricultural stocks due to the poor harvest the previous year.

remaining former Gundo Lashu households reported a mean total income of R1,071 (s.d. 688). For Zibambele households the total mean income was R656 (s.d. 454). The total household monthly incomes are significantly different between the two groups of currently employed PWP households,²⁵⁷ and indicate a mean adult equivalent per capita income of R246 (s.d. 214) for former Gundo Lashu households and R338 (s.d. 214) for current Gundo Lashu households. The mean per capita figure for Zibambele households is R154 (s.d. 96). These figures are illustrated in Figure 11.7.

Figure 11.7: Total Monthly Household Income, Current Gundo Lashu and Zibambele (Rands)



Source: Own calculations from PWP Survey 2003.

As discussed in chapter eight, these figures cannot be directly compared with the distribution of total income reported in either the LFS 2003 or Census 2001, as the LFS collects data only on primary income, and excludes remittances and community contributions, while the

²⁵⁷ Two-sample t-test, $df=525$, $t=13.26$, $p=0.000$.

Census gathers only limited and banded income data, which was used in the earlier PSM in order to provide an indication of relative household poverty, but cannot be used for direct comparative purposes. However, while they are not directly comparable to LFS or Census data, the PWP Survey data give a detailed indication of total income received by the PWP households, and the diversity of income sources.

11.4 The Impact of PWP Participation on Income Poverty

The impact of PWP participation on household income poverty is illustrated by calculating Poverty Incidence Curves (PICs) for the two programmes, following Ravallion (2003), and then total income in the PWP households is reviewed in the light of a poverty line, using Foster-Greer-Thorbecke (FGT) indices to estimate the incidence and depth of poverty within the sample groups. Finally, some conclusions are drawn regarding the role of PWP income in reducing income poverty.

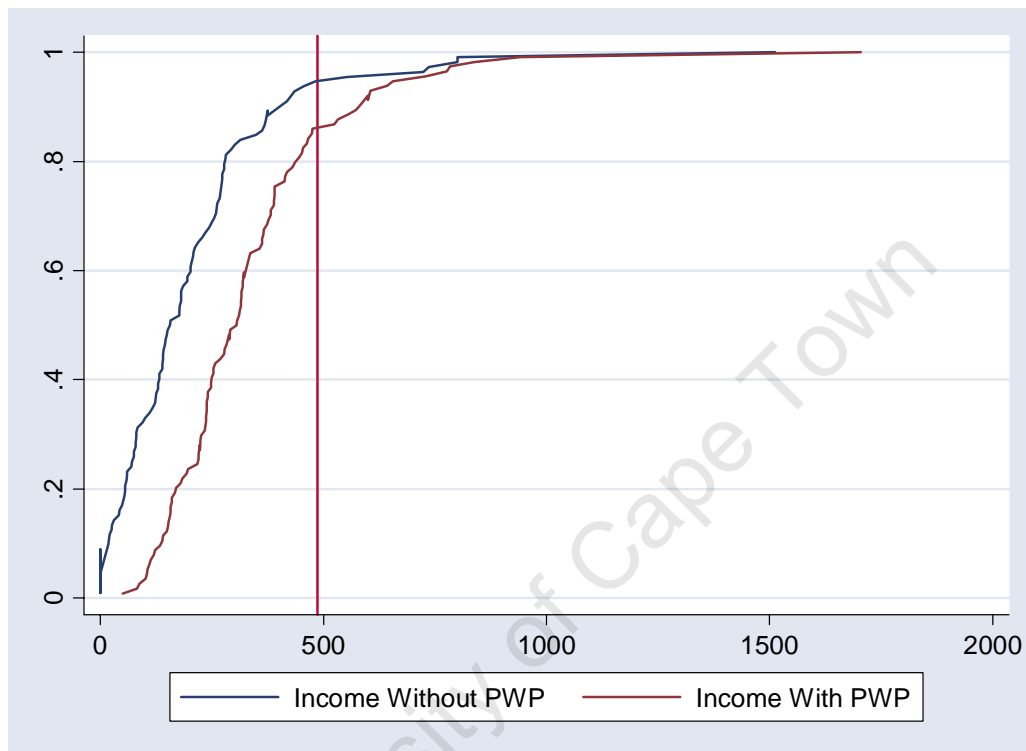
Poverty Incidence Curves

These findings are illustrated graphically in the PICs set out below. The PICs calculated for each programme illustrate the impact of the intervention on headcount poverty. The upper curves on each figure illustrate total monthly income per adult equivalent, including the PWP income; and the lower curve the 'estimated counter-factual PIC, after deducting the imputed income gains from the observed (post-intervention) incomes' (Ravallion, 2003:2). Income forgone has also been added to the counterfactual PIC, in order to more closely model the income reality.

The vertical line represents a poverty line of R486. Several poverty lines are currently in use in South Africa, offering differing estimates of the proportion of the population living in poverty, and for this analysis, a version of the Household Subsistence Line (HSL) was selected. The HSL is a measure of the theoretical monthly cost of basic needs derived from a basket of goods and services comprising food, housing, fuel, light and transport. The figure for 2003 was derived from the HSL for low-income households (Potgieter, 2003), and is based on the 2002 low-income HSL (Meth, 2004a), inflated to 2003 prices. This results in a low-income HSL of R486 per adult equivalent, which will be used as an approximate

indicator of household poverty. The shift of the curve to the right in both cases confirms the positive impact on poverty reduction of programme participation.

Figure 11.8: Poverty Impact of Disbursements Under the Gundo Lashu Programme (Income per Adult Equivalent)*



Source: Own calculations from PWP Survey 2003.

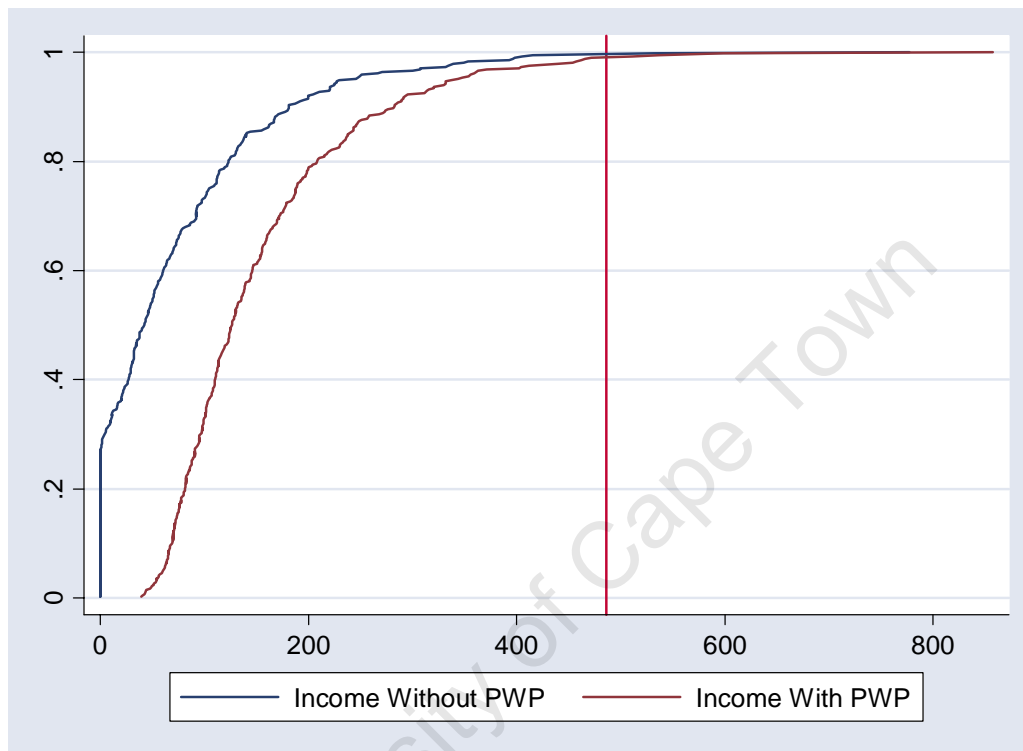
Note: * Current Gundo Lashu households only

Figure 11.8 indicates that approximately 5% of the Gundo Lashu sample have been brought out of poverty by participation in the programme, on the basis of the R486 poverty line. Depending on where the poverty line is set, it would be possible to estimate the corresponding reduction in headcount poverty achieved through programme implementation.

While the Gundo Lashu programme had a marginal impact on headcount poverty reduction, Figure 11.9 illustrates that the Zibambebe programme had no impact on headcount poverty, on the basis of the R486 HSL. However, the PICs indicate that PWP participation reduced

the poverty gap in both instances, reducing the intensity of income poverty experienced in PWP workers' households in both programmes.

Figure 11.9: Poverty Impact of Disbursements Under the Zibambele Programme (Income per Adult Equivalent)



Source: Own calculations from PWP Survey 2003.

Foster-Greer Thorbecke (FGT) Exploration of PWP Household Poverty

Using the adult equivalent figure, the incidence of poverty $P(0)$ was first calculated in order to derive a headcount estimate of poverty within the sample households. This revealed that even with PWP income, 99% of Zibambele households and 86% of current Gundo Lashu households fell below the monthly HSL poverty line of R486, as did 91% of the former Gundo Lashu households. Participation in the PWP has not moved these households out of poverty.

The adult equivalent income for the same households before and during PWP employment should be used to ascertain the poverty impact of a PWP, and a difference in difference

(DID) analysis conducted. However, as discussed above, the lack of baseline data made the inclusion of a non-treatment control group in the survey impossible, since the characteristics of PWP participants were not known *a priori*. It is interesting nonetheless to compare the poverty headcount among former and current Gundo Lashu households. This is not a technically robust approach, since the former and current Gundo Lashu households may have differing characteristics which may influence their total income independently of the PWP programme, but this caveat notwithstanding, it is of interest to note that while 86% of current Gundo Lashu households fell below the per capita HSL of R486, the figure was 91% for former households. These figures may indicate that Gundo Lashu employment has reduced the headcount poverty incidence among participating households, and the implied percentage reduction is consistent with the PIC estimate of a 5% reduction in poverty among current Gundo Lashu participants, illustrated in Figure 11.7 above, however, this the change in headcount poverty is not statistically significant.²⁵⁸ The headcount poverty findings overall make it clear that, with all sources of household income taken into account, PWP participation fails to bring the majority of workers' households in either programme above the R486 adult equivalent poverty line.

The Depth of Poverty P(1)

The second Foster-Greer-Thorbecke index, (P_1) which calculates the poverty gap ratio may be used to assess the depth of poverty experienced by participants in the two programmes. This index is particularly useful given the high incidence of households falling below the poverty line, and the need for a more nuanced understanding of their poverty status.

The poverty gap, the distance between adult equivalent household income and the poverty line, was first calculated for both sets of households. For current Gundo Lashu households, the mean shortfall for those beneath the poverty line is R227 per adult equivalent per month (ranging from R424 to R11), and for households with former Gundo Lashu workers it is R322 (ranging from R473 to R0.3). For Zibambele households the mean shortfall is R332

²⁵⁸ $\chi^2=1.86$ at 0.05 significance level, with $df=1$.

per adult equivalent per month, ranging from R436 to R7. The poverty gaps in both programmes are illustrated in Figure 11.10, which indicates that a greater proportion of the Zibambele sample falls further below the poverty line, with a greater mean shortfall beneath the poverty line than the current Gundo Lashu sample, and that they have a more concentrated distribution of income.²⁵⁹

Figure 11.10: Shortfall Between Adult Equivalent Income and the Poverty Line (R486)



Source: Own calculations using PWP Survey 2003.

The poverty gap ratios calculated on the basis of these figures indicate a P_1 value of 0.48 for current Gundo Lashu households, and 0.72 for Zibambele households, indicating a significantly greater depth of poverty among Zibambele households.

11.5 Income Poverty Conclusion

A key insight from the FGT analysis was that most participants in the Gundo Lashu programme, and almost all of those in the Zibambele programme were living below the HSL

²⁵⁹ For Limpopo the s.d. is 124.6 and for KwaZulu-Natal, 81.2.

poverty line, even while in receipt of the PWP wage. However, while participation in the PWP did not move these households above the poverty line, it did contribute to a reduction in the poverty gap, and hence reduced the intensity of poverty experienced in workers' households.

Interestingly, the FGT analysis indicated that while participants in both programmes were poor, on the basis of the HSL poverty line, the Zibambebe programme is reaching those who are experiencing a significantly greater depth of poverty. This raises the broader question of whether reaching 'the poor' is in itself an adequate measure of programme success, in a context where a large proportion of the population are poor, and whether the key question might rather be, what sections of the poor are being targeted. The PIC analysis confirms that both PWPs have had a positive impact in terms of the poverty experienced by participating households. However, while PWP participation has successfully reduced the depth of poverty endured by participants, the impact in terms of reducing headcount poverty has been negligible, due to the low value of the transfer relative to the prevailing poverty gap in each case.

11.6 The Impact of PWPs on Non-Income Indicators of Poverty

The PWP literature tends to assess impact in terms of the value of the wage transferred. However, the value of the PWP wage is essentially a proximate, rather than ultimate indicator of impact, and having reviewed the income implications of PWP participation, the impact of the wage on a range of non-monetary and socio-economic indicators will now be examined, with a focus on consumption, financial and material asset ownership, and human capital formation (education and nutrition). In addition, reported impacts relating to psycho-social well-being, access to state grants, and the assets created through the PWP are reviewed, as well as the implications for the local economy. This analysis has not been designed as a formal evaluation, but rather as an opportunity to explore from a primarily descriptive perspective the areas in which the PWP transfer has impacted on the lives of participants.

Research in this area was subject to methodological limitations due to the lack of baseline data on participating households, and as a result, the survey questions informing this chapter

were largely phrased in terms of current and previous experience, and hence were reliant on recall rather than panel information for the same households over time. It should also be noted that PWP employment may not be the sole or even primary causal factor informing the changes reported, and exogenous factors, such as the increased roll-out of social protection grants (see Guthrie (2003)) may also have influenced the welfare of households during the PWP employment period. However, the effect of transfer income on non-income indicators of poverty is unlikely to be significant for the Gundo Lashu workers during the limited period of PWP employment, and should not be overstated for the Zibambebe households, who showed a low level of grant take-up. In the light of this, where positive changes have taken place in socio-economic indicators over the period of PWP employment, it is likely that these changes are indicative of a causal relationship, although exclusive causality cannot be assumed.

Consumption

All respondents were asked about the main use of the additional income earned through PWP employment in their household. Food purchase was the main use of additional PWP income in both groups, in 100% of Zibambebe households and 79% of Gundo Lashu households, with clothing (13%), and education (4%) being the other main uses.

In terms of non-principal use of the income, additional PWP income was reportedly used to pay for education by 82% of Zibambebe households and only 37% of Gundo Lashu households, possibly indicating a greater prior shortfall in Zibambebe education expenditure (see the following section for further discussion of this issue). The fact that only 13% of Zibambebe households spent PWP income on burial societies, compared with 42% of Gundo Lashu households, was investigated in the focus group discussions, where Zibambebe workers reported investment in burial clubs as an aspiration rather than a current option, given their income levels.²⁶⁰ They reported that, in the absence of formal burial club

²⁶⁰ This confirms findings by Ardington and Leibbrandt (2004:11) calculated from the October 2000 IES and the September 2000 LFS, which show that the proportion of households with insurance increases with income, and that in the lowest deciles very few households have funeral insurance (including burial society membership).

membership, mutual self-help was their primary coping mechanism, derived from the increased social capital arising from membership of a local Zibambele road maintenance team.

Financial Assets

Households were asked to compare their current situation, in terms of ownership of financial assets (formal or informal savings, insurances, etc.), with their situation prior to joining the PWP. Thirty-six percent of current Gundo Lashu households reported increased financial assets, and 18% of former Gundo Lashu households (possibly reflecting poor recall, or diminution of financial assets since the termination of PWP employment). By contrast, 64% of Zibambele households reported an increase in financial assets since joining the programme. A chi-square test indicates that the difference in the responses between those currently employed on the Gundo Lashu and Zibambele programmes is significant.²⁶¹ This reflects Devereux and Solomon's suggestion that savings are likely to increase with longer programme duration (Devereux and Solomon, 2006). Although the monthly wage transfer was significantly smaller in the Zibambele programme compared to the Gundo Lashu programme, the sustained duration of the employment resulted in a greater increase in financial assets. Also, the analysis above suggests that the Zibambele households were from a poorer socio-economic stratum than the Gundo Lashu households, and, consequently, the impact of the transfer is likely to have been greater. The linkage of payment modalities to formal sector banking in the case of the Zibambele workers is also likely to have promoted a growth in ownership of financial assets (in terms of holding a bank account), which may previously have been extremely limited, and which may possibly indicate greater linkage to financial assets, rather than actual increases in asset ownership. The focus group discussions also revealed that one consequence of the social capital constructed between the workers as a result of sustained employment and social facilitation by the Department of Transport, was increased informal savings activity (for example, through *stokvels* and insurance 'self-help')

²⁶¹ $\chi^2=28.97$, $df=1$

clubs) among groups of workers. These groups offered informal financial assistance at times of financial stress, for example, by providing the goods required for funeral ceremonies.

Material Assets

In terms of material assets, the results mirror the changes in financial asset ownership among Gundo Lashu households. Only 20% of former Gundo Lashu households reported an increase in material asset ownership (cooking implements, furniture, etc.), while among current Gundo Lashu households the figure was 35%. The fact that current Gundo Lashu households reported a more positive impact in terms of material asset ownership than former households, suggests that either the benefit itself, or the perception of the benefit, decreased after the period of employment and the associated wage income. Among Zibambebe households, by contrast, 65% reported an increase in material asset ownership, and the difference between current Gundo Lashu and Zibambebe household reporting of material asset ownership was significant.²⁶²

These findings may illustrate the positive impact of sustained employment on accumulation (in terms of both financial and material assets), although it needs to be considered in the light of the lower socio-economic status of the Zibambebe households in general, and the fact that, as a consequence, their initial asset ownership status was likely to be lower, and by implication, their prioritisation of the accumulation of basic household assets greater.

Human Capital Formation

Education

A key area of expenditure reported by both Zibambebe, and to a lesser extent Gundo Lashu workers, was education. In order to examine the impact of programme participation on children, the extent of regular school attendance by all children in the PWP households was

²⁶² $\chi^2=30.78$, at significance level 0.05, df=1.

explored in the survey.²⁶³ Each household was asked whether all school-age children attended school regularly²⁶⁴ at the time of the survey, and prior to PWP employment. The results are presented in Table 11.3.

Table 11.3: Impact of PWP on Regular School Attendance

	Households with former Gundo Lashu workers (n=128)	Households with current Gundo Lashu workers (n=102)	Zimbabwe Households (n=392)
	% of households in which all school-age children regularly attended school		
Prior to participation in PWP	94 (n=120)	89 (n=91)	66 (n=257)
At time of interview	93 (n=119)	94 (n=96)	89 (n=350)

Source: Own calculations using PWP Survey 2003.

Ninety-eight percent of current Gundo Lashu households with school-age children reported that all the children were attending school regularly at the time of the interview, while for former households, the rate was 96%, rising from 93% and 95% respectively prior to PWP employment. These attendance rate changes are not significant for current or formerly employed Gundo Lashu households, and there is no indication of a change in attendance after PWP participation.²⁶⁵

For Zimbabwe households however, the impact of PWP participation on education is significant;²⁶⁶ participation in the PWP raised the percentage of households with regular

²⁶³ 'Regular participation by all children' was adopted as the education indicator in preference to the more conventional but less sensitive usage of 'enrolment' due to the high levels of enrolment (and drop out) in South Africa (Van der Berg, 2007), which undermines the usefulness of the indicator in terms of the formation of human capital.

²⁶⁴ The regularity element was included in the question in order to identify regular and consistent participation in education, as distinct from the erratic participation at times of income availability reported in focus group discussions prior to the survey development (Mankweng cluster, Limpopo, March 2003).

²⁶⁵ The results of chi-square tests are $\chi^2=1.6$ and $\chi^2=0.06$ for current and former Gundo Lashu households respectively, at significance level 0.05, df=1.

²⁶⁶ $\chi^2=63.11$, at significance level 0.05, df=1.

school attendance by all children from 67% to 90%. Moreover, 26% of households where only some children used to go to school, shifted into regular school attendance for all children, subsequent to PWP employment (not illustrated in Table 11.3).

The findings suggest that for Gundo Lashu households, regular school attendance levels were high prior to employment in the PWP, and PWP participation did not have a significant impact on raising them further. However, in Zibambebe households where the initial levels of attendance were considerably lower, attendance rates rose significantly after PWP employment. The reasons given for children in Gundo Lashu households not regularly attending school prior to participation in the PWP, were the cost of school materials (uniforms, text books, pencils, etc.) and the need for children to engage in domestic or paid work to support the household. Likewise, in Zibambebe households, the lack of money for school materials was mentioned as the key constraint, while hunger and the need for children to work or look after the family were reported as the main constraints in 7% of households.²⁶⁷ This indicates that poverty remains a serious constraint on school attendance, notwithstanding the policy of fee waivers for the poor. The reason for the continued non-participation in education for some children, even after their households enjoyed PWP employment, was in both cases cited as lack of money for school equipment, while in Zibambebe households, the need for children to work to earn income to support the family was also raised as a key constraint.

These findings were borne out by focus group discussions with the Zibambebe workers. While households could sometimes earn money through casual work to pay for school fees, they were often unable to afford consumables, such as stationery or uniforms, and in these instances children were required to leave school after a period of grace. Equally, hunger was associated by mothers with poor school attendance; one reported boiling a pot of water on the fire before sending the children to school, in order to encourage them and give the

²⁶⁷ In one of the few areas where detailed 'other' responses were recorded by the interviewers, the surveys contained specific quotations from the respondents including; 'Children did not have enough food', 'Children were hungry and preferred not to go to school', 'They were hungry and preferred not to go', 'They were hungry', and 'Hunger to children'.

impression that there might be food upon their return, despite their having gone to school with empty stomachs.

Nutrition

In the same way that households were asked about education, so three questions exploring nutrition were posed, concerning household nutrition prior to PWP participation and at the time of the interview. The first asked about the frequency of adults skipping meals because of lack of funds, the second explored an indicator of more severe poverty – the incidence of adults not eating for a whole day due to lack of funds, and the third explored the impact of lack of funds on the provision of meals for children. The pattern of responses was similar for all three questions, and responses to the first question regarding the frequency of adults skipping meals due to lack of funds are set out in Table 11.4.²⁶⁸

Table 11.4: Impact of PWP on Frequency of Adults Skipping Meals Due to Lack of Funds

		Before PWP	During PWP
		(% of households reporting this behaviour)	
Current Gundo Lashu (n=114)	Most of the time	13 (n=15)	7 (n=8)
	Sometimes	32 (n=36)	18 (n=20)
	Never	55 (n=63)	75 (n=86)
Zibambele (n=413)	Most of the time	49 (n=204)	1 (n=6)
	Sometimes	41 (n=166)	18 (n=74)
	Never	10 (n=43)	81 (n=333)

Source: Own calculations using PWP Survey 2003.

²⁶⁸ See appendices 12 and 13 for the full set of results.

Table 11.4 indicates that in all cases there was a significant improvement subsequent to programme participation,²⁶⁹ however, the impact on those regularly skipping meals, who may be assumed to be the poorest, was only significant for Zibambele households, and marginal among the Gundo Lashu households.²⁷⁰

Responses to all three questions indicated a positive correlation between improved household nutrition and PWP participation. This effect is particularly striking among the Zibambele households where the initial nutrition situation was significantly worse than among the Gundo Lashu households. It is noteworthy that the Zibambele households reported adult nutritional behaviour characteristic of chronic under-nutrition, prior to participation in the programme, with adults reporting a high incidence of skipping meals for whole days (49% of households reporting this occurring frequently) and not eating for whole days (40%), while 34% of households reported reducing the size of children's meals. The reported impact of participation in the programme on nutrition was statistically significant in each case for the Zibambele households, but not for the Gundo Lashu households, and is consistent with the primary use of PWP income being food for the Zibambele households.

Psychosocial Well-being

Psychosocial programme impacts were raised by participants in both the Gundo Lashu and Zibambele focus groups. Participants reported that prior to participation in the programmes they had engaged in activities of which they were ashamed, such as begging for food, sending children to school hungry, and wearing ragged clothes. They were not able to pay school fees on a regular basis, and even when the fees were waived in many cases, children were eventually excluded from school because of their inability to purchase the materials and uniforms required.

²⁶⁹ 3x2 chi-square tests give $\chi^2=10.25$ for current Gundo Lashu households, and $\chi^2=445.62$ for Zibambele households, at significance level 0.05, df=2.

²⁷⁰ 2x2 chi-square tests on the incidence of regularly skipping meals gave $\chi^2=250.33$ for Zibambele households and $\chi^2=2.37$ for Gundo Lashu households, at significance level 0.05, df=1.

In the Zibambele focus groups, women reported that their poverty had prevented them from participation in social processes, such as activities which represented an expression of their belief systems, including performing appropriate burials, making spirit offerings, and holding the ceremonies required to mark the anniversary of family deaths. The consequence of the failure to observe these customs was social stigma and shame, conforming to the social dimension of poverty characterised by Sen in terms of social 'functioning'. Sen defines this class of functionings as 'achieving self-respect or being socially integrated' (Sen, 1993: 31), and argues that it is of greater complexity than elementary functioning, such as being adequately nourished or in good health. Subsequent to their PWP employment, the workers reported giving food to the needy in their communities, which they regarded as an illustration of their changed social as well as economic status within the community.

Access to Grants

One unanticipated further indicator of welfare explored in the survey is access to grants. Since joining the PWP programme, 15% of Gundo Lashu households reported increased access to government grants, compared to 28% of Zibambele households. In part this reflects the successful efforts of the Department of Social Welfare to promote grant take-up (Guthrie, *op cit*). However, the differing incidence of increases in grant take-up may also be attributable in part to the different design components of the two programmes. One design factor contributing to the significant increase in grant take-up among the Zibambele households was likely to be the payment modality, with workers paid almost exclusively through bank transfers. This payment modality required workers to hold bank accounts, which in turn required possession of an identity document, and the programme included assistance in acquiring identity documentation. An additional benefit of identity document ownership was an increased opportunity to claim grants which were previously inaccessible (McCord, 2002). In the Gundo Lashu programme, by contrast, ownership of identity documentation was reportedly a pre-requisite for eligibility, with ID books being used as the basis for the employment lottery process, implying that those without identity documents

were implicitly excluded from the selection process.²⁷¹ Hence, the initial levels of grant take-up were likely to differ, with the Zibambele workers having lower levels of take-up due in part to their lack of documentation. Also, the social facilitators working with the Zibambele group informally provided information on grant eligibility and access, an input which was not included in the Gundo Lashu programme. It is interesting to note that notwithstanding this 28% increase in grant take-up, the levels of take-up of pensions and child support among Zibambele workers remain below average (Noble *et al.*, 2005). This is partly due to the fact that those in receipt of the larger grants, such as pensions, may be excluded from programme participation.

Impact of Assets Created

Finally, while the survey did not attempt to address the question of the socio-economic impact of the assets created or maintained through the PWP, recipients were asked whether the asset had benefited the household. The response was overwhelmingly positive, with 90% of Gundo Lashu and 97% of Zibambele respondents responding positively, with improved transportation being the major benefit identified by over 70% of respondents, and improved school access by a further 10-15%. Unfortunately, it was not possible to verify or quantify these benefits, or to assess the quality of the asset created or its sustainability.

11.7 The Local Economy

An attempt was also made to review the broader economic impact of the programmes on the local economy. In order to gain an indication of the extent of income flows to the local economy arising from the PWP wage transfer, respondents were asked where they purchased most of their food, the major item purchased with the PWP income. Sixty-seven percent of Gundo Lashu respondents reported purchasing most of their food from local shops, 23% from shops in town, and 10% from local informal traders or neighbours, implying that almost 80% of the PWP households injected their PWP-funded food expenditure into the local economy. By contrast, 91% of Zibambele respondents purchased

²⁷¹ It should be noted, however, that no reports of exclusion from the programme due to lack of identity documentation were noted by Gundo Lashu management, M. Mondlane, May 2004, pers. comm.

most of their food in town, with only 9% buying most of their food in local shops or from informal traders and neighbours. This reflects the fact that the Zibambele wage is paid through the commercial banking sector, and therefore wages are accessed in the local towns. This indicates that payment modalities can be a critical determinant of the location of spending and of resulting multipliers. In the case of Zibambele, the expenditure of the PWP wage is unlikely to stimulate local informal sector growth by increased demand, since so little of the wage income enters the local economy. However, the Zibambele workers reported significant savings both from the economies of scale inherent in being able to purchase food in bulk, due to increased access to cash, and also due to purchasing in towns where prices were reported to be up to 50% lower.

The focus group discussions revealed that local micro-enterprises sprang up around the Gundo Lashu work teams, with small businesses selling snacks to workers at break times,²⁷² and small markets arising spontaneously on pay day, similar to those noted by Ardington and Lund around pension points on pay day (Ardington and Lund, 1995). However, these were reported to have ceased trading once the period of employment was completed. Zibambele workers reported no such growth of enterprise to service them. This difference is probably attributable to the fact that the Zibambele workers were working part-time flexible hours and individually or in small groups, and not concentrated into work teams in a particular area, like the Gundo Lashu workers.

The other vector through which PWPs have the potential to stimulate the local economy is the economic benefits accruing from the asset created. This impact is contingent on i) the strategic value of the asset created, and ii) the quality and durability of the asset. These factors are in turn contingent on the initial asset selection processes, the adequacy of technical aspects of construction and the subsequent management of the assets produced, which is largely determined by local government performance.²⁷³ These factors were not

²⁷² For example, the marketing of vetkoeke (fried dough balls) to PWP workers was reported in the Gundo Lashu focus group discussions.

²⁷³ The contingency of indirect positive social and economic outcomes from infrastructure provision on a range of linked institutional factors is illustrated in Mashiri and Mahapa (2002).

within the scope of the survey, and consequently, the indirect economic benefits arising from the provision of infrastructure are excluded from this analysis. This omission is sanctioned by Datt and Ravallion who go so far as to assert that ‘it is theoretically possible that a workfare scheme dominates alternatives [social protection instruments], even if the assets created or other indirect effects have no value’ (1994a: 436). While it is possible to question the validity of this assertion, it serves to illustrate the primary importance ascribed to the direct (wage) rather than indirect (asset) vectors of social protection transmission in the conventional PWP canon.

11.8 Conclusion

The PWP Survey offers an insight into the relative incidence and impact performance of differing PWP responses in the context of chronic poverty and unemployment, and the appropriateness and limitations of each model. The Zibambele programme was a type B programme, while the Gundo Lashu programme was a type C programme, with elements of A and D, with the typical characteristics of the short term construction-based PWP which dominates the genre in sub-Saharan Africa. The survey indicates that both programmes had negligible impact in terms of reducing headcount poverty. However, both programmes contributed to reducing the depth of poverty experienced by participating households, and addressing other, non-monetary aspects of poverty.

Despite the continued high levels of income poverty, participation in both programmes had a beneficial impact on all the dimensions of poverty examined; income, asset ownership, access to services, and the capabilities and psychosocial aspects of poverty. The initial situation of the Zibambele households was consistently found to be one of greater poverty than for the Gundo Lashu households, whichever dimensions of poverty were explored, and consequently benefits which were, in many cases, marginal for Gundo Lashu households were significant among Zibambele households,²⁷⁴ despite the significantly higher wage

²⁷⁴ It is interesting to note that the significant impacts of the PWP wage in terms of nutrition and education etc. discussed above were achieved with a per capita transfer which is below the level of the proposed Basic Income Grant of R100 (see Samson (2002)). In the light of this, the poverty-related impacts noted for the Zibambele transfer above may serve to approximate a lower bound for the impact of a basic income

offered in the Gundo Lashu programme. Also, the benefits in the case of the Gundo Lashu participants were limited by the short duration of the employment. For these workers the benefit would have the characteristic of a wage shock rather than a sustained wage increase, a consideration which would engender different economic behaviour and use of the wage transfer compared with the Zibambebe workers with sustained access to income.

In the case of the Zibambebe programme, there are indications that PWP participation, with its open-ended guarantee of employment, impacted significantly on factors which influence the reproduction of poverty, examples being the reduction in chronic under-nutrition and increased participation in education.²⁷⁵ However, no evidence was found in the survey to suggest the existence of significant sustained social protection benefits accruing through the Gundo Lashu programme. This is consistent with the theoretical argument outlined above that type B PWPs were more likely than short-term type A, C or D programmes to confer sustained benefits in situations of chronic poverty.

This is highlighted by responses to a question concerning the sustained impact of participation in PWP employment on poverty, subsequent to the ending of PWP employment.²⁷⁶ Gundo Lashu households were asked whether participation in the programme would lead to a sustained reduction in household poverty, after the programme

grant. This offers a challenge to the argument frequently asserted by the South African government that a transfer of R100 would not have a significant impact on poverty; following the July 2003 Legkotla President Mbeki was quoted as saying that 'if you give everybody a R100 a month (sic) it will not make a difference [to poverty]' (Weekly Mail and Guardian, 1-7 August 2003:6), sentiments echoed by Minister Trevor Manuel who argued that 'someone had to explain how R100 a person would make a difference to the lives of the poor' (Business Report, 25 August 2003:12) and reiterated in July 2004, when Mbeki was quoted as arguing that a grant set at this level would not have a significant impact on poverty, in an article entitled 'Mbeki rejects "much vaunted" grant' (This Day, 13 July 2004). The findings above indicate that while this might be true in terms of reducing headcount poverty, the number of people living beneath a given poverty line, this level of transfer would reduce the intensity of poverty, and could have a significant impact on critical dimensions of poverty such as education and nutrition.

²⁷⁵ It is interesting to note, however, that it is unclear in the context of mass unemployment whether education does have a significant role to play in reducing poverty. For example, see Keswell and Poswell (2003) for a critical discussion of the applicability of assumptions of Mincerian returns to education in the context of mass unemployment in South Africa, and a suggestion that, to the contrary, the rate of returns to education may be negative for certain levels of education.

²⁷⁶ This question was only asked of Gundo Lashu households, out of sensitivity to the anxiety expressed by Zibambebe workers regarding the potential termination of the programme.

was completed. Among households with members currently employed by the PWP, 45% of respondents stated that programme participation would lead to a sustained reduction of poverty, but among those for whom PWP employment had been completed this figure fell to 33%. This indicates that after completion of the PWP employment, only one-third of participants in the programme anticipated that employment in the PWP would have sustained anti-poverty benefits. For these workers, the income benefit of programme participation had the characteristics of a 'wage shock' rather than a sustained increase in income, engendering different usage of the wage transfer compared with the Zibambebe workers for whom access to income was sustained.

Where significant benefits were identified in terms of material and financial asset ownership, human and social capital improvements, and perceptions of sustained poverty reduction, these were concentrated in the Zibambebe programme, offering lower remuneration but greater employment security and, most importantly, extended employment duration. These findings are consistent with the findings of Dev (1995) and Devereux and Solomon (2006) who highlight the importance of sustained employment for addressing the challenge of chronic poverty.

11.9 Programme Design Implications

Many programme design issues have arisen from the discussion of the PWP Survey in the preceding chapters, which have been highlighted in the text as they have arisen. However, there are three fundamental insights which emerge from the analysis: i) wage targeting does not ensure the participation of the poorest, and may be less effective than community based selection procedures, ii) the social protection impacts of PWPs may be marginal if they are not targeted at the poorest, and iii) the duration of social protection benefits arising from PWP employment may be limited to the period of programme implementation, with sustained benefits only accruing if the transfer period was sufficient to promote accumulation and significant investment in human capital (such as investment in child

nutrition and sustained investment in education).²⁷⁷ This empirically confirms the core thesis set out in this work, that a short-term period of employment in a PWP is unlikely to have significant sustained social protection outcomes beyond the period of programme implementation, in a context of chronic poverty, as the income is primarily used for consumption purposes.

If sustained social protection outcomes are desired, conferring preventive or promotive social protection benefits, then a medium-to-long term intervention is required which will either provide ongoing transfers to enable consumption smoothing as long as the need for support exists, or, if benefits are to be sustained after the completion of the programme, accumulation in some form is necessary. These benefits were identified in the type B Zibambele programme, offering sustained employment and accumulation, but were not apparent in any significant degree in the short-term Gundo Lashu programme. These findings represent an empirical insight into the limitations of short-term PWPs as an instrument of social protection in the context of chronic poverty, and a challenge to the assumptions of the current policy discourse.

²⁷⁷ It is interesting to note that in order to have a sustained impact on physiological and mental development, improved child nutrition must occur prior to the age of three, and so the sustained nature of any gains resulting from improved child nutrition is conditional on the inclusion of children within the intervention at an appropriate age.

12 CONCLUSIONS

The thesis has attempted to illustrate that the assumptions underlying PWP choice are problematic and open to criticism, that type A, C or D programmes are unlikely to deliver the goals of social protection and development frequently ascribed to them in the policy discourse, and that type B programmes have their own associated shortcomings relating to cost and operational feasibility.

The prevailing problem relating to PWPs in sub-Saharan Africa in particular is the widespread adoption of a social protection response (a short term PWP) which may function well in terms of consumption smoothing in the context of short-term labour market disruptions, but fail to meet ongoing and longer-run social protection policy objectives in a chronic poverty context, offering only palliative inputs of limited significance. PWPs appear to be protected from the scrutiny and criticism to which other social protection instruments are subject, with the shortcomings in their performance frequently overlooked, in deference to a set of often unfounded assumptions about how PWP are believed to operate.

12.1 Summary of the Key Arguments

It is interesting to note that the Social Protection Sector of the ILO (in a statement which indicates some tension with the perspective promoted by the Employment Policy Department, responsible for promoting initiatives such as the EIIP) has been forthright in its criticism of the reality, as opposed to the 'public image' of PWPs, as exemplified in this passage which confirms and summarises much of the critique set out in this thesis:

'In sum, public works have long appealed to those concerned with poverty and unemployment. They are frequently used in developing countries, and are often presented as the means of creating public infrastructure, generating jobs and 'targeting' the poor. Unfortunately, there are reasons for skepticism about the wilder positive claims made for public works. One is that that they use up a lot of scarce resources, and result in low productivity work being done. Another is that they are not very good at 'targeting'. The poorest and most insecure are likely to be at the end of the queue for these casual jobs. Yet another is that such schemes are prone to political corruption. And perhaps above all, they have to be massive schemes if they are to have much effect on the incidence of poverty and economic insecurity.' (ILO, 2004:372)

While the statement above sets out a critique of PWP design, implementation, and performance, reflecting one of the key strands of argument in this thesis, the other strand, which is not found elsewhere in the literature, is a critique of the conceptual weakness of the PWP debate, particularly in relation to the social protection agenda, and it is this weakness which the thesis has sought both to illustrate, and address in some measure. Conceptual frameworks have been presented for codifying the different types of PWPs and also their varying sets of objectives, and a theoretical case has been made for the argument that certain PWP types are more appropriate in particular circumstances than others, in an attempt to differentiate the range of forms and functions of PWPs internationally, and to link particular forms of PWPs with particular functions and contexts, and assess their likely outcomes. The core argument is that short-term, types A, C and D PWPs can potentially function acceptably in acute labour market crises, but that there is no evidence or theoretical basis for expectations that such programmes will be effective instruments in sustained or repeated labour market crises. This analysis holds true for the situations of chronic elevated unemployment and underemployment which prevail in many developing countries, and in particular, in much of sub-Saharan Africa.

It was argued that in terms of providing social protection, a PWP has the potential to confer benefits through the three vectors: the wage transfer, the assets created, and the skills or training transferred during PWP employment. However, when examined empirically it was found that the means of assessing PWP performance in each of these areas is constrained, and documentation of impact, beyond days of employment created, or wages transferred, is scarce in the literature. There are limited data on the impact of assets created over time, and the impact of skills development and labour market experience. Inasmuch as data are available, they indicate that skills development only has the potential for significant impact in contexts of frictional, rather than structural unemployment, and as such may not be well suited to the sub-Saharan African context. Even with the wage transfer, the simplest vector of social protection, detailed analysis suggests that benefits may be significantly overstated, with the net PWP income gain comprising only 30-50% of the gross wage in some instances. Even the adoption of the restricted wage as a form of targeting was found to be problematic, leading to the exclusion of labour constrained households from programme participation and also limiting the potential income benefits of participation.

Mirroring the conceptual lack of clarity, and the poor evidence base for PWP evaluation, an interesting and complex picture emerges in relation to PWPs and poverty reduction in the literature, exemplified by the argument put forward by the World Bank's Vodopivec, who initially concedes that;

‘direct evidence for the effects of public works programs on poverty reduction is scant’ (2004:74)

But then goes on to argue that:

‘The scope for reducing poverty through public works programs also appears to be large.....due to the temporary nature of most of these programs, their impact on poverty is often transitory’. (*ibid*:74-75)

Despite the scant evidence, Vodopivec retains his confidence that PWPs’ potential for reducing poverty is large, even while conceding that in reality, the impact is transitory in most cases. This typifies the confusion at the heart of the PWP discourse, which this thesis has set out to expose and illuminate.

12.2 Problem Areas in the Current Literature

The limited analytical work which is available on PWPs is primarily focused on Asia, relating to the MEGS and JRY in India, and to a lesser degree the PK in Indonesia, and programmes in Latin America, with particular reference to the Trabajar and Jefes programmes in Argentina. Most of the detailed research into impact analysis has focused on type B programmes, EGSs or GEPs, offering longer-term time horizons and hence greater opportunities to monitor and assess impact. However, even within this literature, the focus is still primarily on immediate, rather than sustained benefits. Most PWPs in sub-Saharan Africa may be characterised as types A, C and D, offering short-term PWP employment. There is little detailed empirical analysis into such forms of PWP, or analysis about these forms of programme in general.

There is also little analysis in the literature of the impact across any vectors other than the wage, and even this vector is itself inadequately interrogated, in terms of the actual cost of participation. Income forgone, has been increasingly addressed in the literature following Van de Walle (1998), but critical issues relating to other dimensions of the material costs of

accessing PWP employment (Pellisery, 2008; Gaiha and Imai, 2005; Sharp *et al.*, 2006), and the human, physical costs of participation (Helen Keller International, 2007) remain largely ignored in the mainstream PWP literature.

There are key evidence gaps in the literature both in terms of impact, as discussed above, and also in terms of incidence, or who participates in PWPs. Neither of these gaps however are highlighted as a problem in the existing literature, despite their critical importance for assessing the efficacy of the PWPs' social protection function. While there is some research into these questions in the Asian context, there is little empirical evidence relating to the incidence of PWP participation in sub-Saharan Africa, in terms of the socio-economic profile of workers, due to the lack of baseline data gathered on PWP participants, and lack of subsequent survey work to rectify this initial omission. The short-term nature (type A, C or D) of most programmes in the continent mitigates against the gathering of such data, which tends not to be included in monitoring schedules, as socio-economic data collection is often perceived as an additional cost burden, rather than an essential prerequisite for meaningful programme impact assessment. These data omissions undermine any attempt to assess the functioning of PWPs as instruments of social protection, and together with the lack of data on performance, render any assessment of the effectiveness of PWP impossible, since it is not possible to calculate either the impact or benefit incidence. In addition, the data on PWP cost are highly problematic. Inasmuch as the data exist, they imply that the cost per unit transferred may be greater than for the cash transfer alternatives, (see, for example, Smith (2001)) however whether such a (putative) premium is acceptable is contingent on the value of the assets created, another area which suffers from a critical data void. Together, these critical areas of data failure undermine the potential for evidence-based policy selection in relation to PWPs. The limited empirical evidence which is available, together with a theoretical analysis based on labour economics, suggests that PWPs may be costly, poorly targeted, and have limited sustained social protection impact, particularly in cases where the form of PWP does not match the form of labour market failure, but more data on these empirical questions is needed.

Frequently PWPs represent the intervention of choice to address the needs of the working age poor unemployed who are not covered by alternative interventions for specific

vulnerable groups (such as children or the elderly), on the basis of the assumption that the principle of 'less eligibility' mediated through the work requirement and low wage leads to effective targeting to the intended group. However, the limited evidence available in the literature indicates that, particularly in the context of highly rationed access to PWP employment resulting from the low coverage of project-based PWPs which tends to typify PWPs in sub-Saharan Africa, wage targeting and the work requirement are often not adequate to prevent significant inclusion and exclusion errors. In this case, additional investment in explicit targeting mechanisms, such as demographic or poverty criteria, possibly using community based selection mechanisms, is required.

This question of incidence was explored in detail in the two South African case studies. The type B Zibambele case study, offering a higher wage rate together with community based targeting mechanisms, had superior poverty targeting outcomes compared with the Gundo Lashu case study programme, which was implemented on the basis of more conventional wage targeting. This finding supports arguments set out by Barrett and Clay (2003) and Mujeri (2002) that it is not adequate to rely on the functioning of the market to ensure the participation of the poorest in PWPs, as the provision of a low wage can provide additional opportunities for cash income for surplus labour in less poor households, while failing to offer wages which match the marginal value of labour in the labour-constrained households which are often among the poorest. Major inclusion errors have been identified in the literature, and given the level of rationing suggested by the scale of many programmes, which is not empirically recorded in the existing literature, this implies commensurately high exclusion errors. The conclusion from this is that PWPs are not necessarily an effective tool for reaching poor, especially labour-constrained households.

In terms of impact, the empirical evidence supports the theoretical argument put forward in the early chapters of this thesis, that PWPs can have short-term impact on consumption smoothing, and possibly also some asset and skills benefits, but that this is contingent on the type of PWP and the nature of the labour market context. As anticipated in the literature review, and theoretical analysis of PWPs and social protection, the survey analysis revealed greater evidence of impact in the context of chronic poverty and unemployment of type B programmes than types A, C or D, and superior poverty targeting resulting from purposive

targeting measures, rather than reliance on the work conditionality and limited wage, which failed to target resources to the poorest.

12.3 Why Do PWPs Remain So Popular?

Given the mismatch between PWP expectations and programme outcome outlined above, the question emerges as to why such programmes are repeatedly implemented. The review of the PWP canon carried out in this thesis indicates that it is not possible to explain the ongoing popularity of PWPs on the basis of evidence of their social protection impact. The literature intimates that either conceptual confusion, resulting in unfounded expectations of PWP performance, or a set of ideological and political preferences, or a combination of the two, rather than empirical evidence, is leading to the repeated selection of PWPs in preference to alternative social protection interventions. These concerns are implicit in the conclusions of Murgai and Ravallion regarding the selection of an EGS (the NREGP) over alternative social protection options in India in 2005 (Murgai and Ravallion, 2005), and are explicitly outlined in Karuri *et al.* (2007) with reference to the political pressure exerted on the commission charged with the development of a comprehensive social protection strategy in South Africa to adopt a PWP-based response to the problem of the working age poor unemployed in preference to a cash transfer alternative.

A degree of politicisation in the implementation of PWPs is also indicated if the timing of the launch or expansion of major PWPs is reviewed in relation to periods of political instability or potential regime change. Examples of the temporal coincidence of PWP initiation and a political imperative to gain support from segments of the unemployed are found in relation to many of the larger and higher profile PWPs internationally; the announcement of the expansion of the South African EPWP was made immediately prior to elections in 2004, while the AGETIP in Senegal was implemented during a period of urban unrest following regime change in an effort to quell urban protest against the government, and the NREGP was launched when the support of the rural poor electorate was critical for a new regime in India (McCord, 2007b). PWPs in such instances offer the opportunity for a government to be seen to be doing something highly visible about the issue of the working age poor, in the eyes of both the domestic constituency and the donor community. At the same time, they enable governments to diffuse accusations of populism which could be

associated with a cash transfer response to the same set of social protection concerns, as PWPs are more ideologically consistent with the dominant neo-liberal political orientation shared by donors and many sub-Saharan African governments.²⁷⁸ PWPs are also consistent with the ideologically, rather than the empirically, constituted concern to avoid ‘dependency’ which informs the current sub-Saharan African social protection debate (Meth, 2005c; Di Lollo, 2007²⁷⁹). The same ideological considerations render PWPs attractive since they represent the prospect of a market-based ‘treatment’ for the problem of the working age poor, through short-term PWP employment, despite the fact that both the theory and the limited but growing body of empirical evidence suggest that short-term PWP employment is unlikely to have a significant impact in the context of chronic poverty and unemployment. In this way the current PWP literature suggests fascinating insights into the political, rather than the empirical processes driving social protection policy selection.

12.4 Conclusions

The conceptual weaknesses and analytical omissions identified in this thesis have not impacted adversely on the popularity of PWPs, largely due to their profile in the popular discourse as a market-based ‘treatment’ for unemployment, which is perceived, without empirical justification, of being less ‘dependency-inducing’ than alternative options, and have the added benefit of being highly visible, and not unacceptably populist.

It has been argued in this thesis that PWP selection is largely based on an empirical void, using assumptions and ideological preferences rather than evidence as a basis for policy making, and that the data required to build such an evidence base are systematically excluded

²⁷⁸ For example, in response to calls for the introduction of a cash transfer based social protection intervention for the working age poor in South Africa, in addition to a range of cash transfers for vulnerable groups outside the labour force, such as children and the aged, South African Finance Minister Trevor Manuel stated that such a grant would constitute ‘unaffordable economic populism’, *Business Day*, 20 August 2002.

²⁷⁹ Di Lollo argues that ‘Concern over “welfare dependency” has featured prominently in the public discourse around social assistance programmes in numerous countries for many years. The notion that social assistance payments tend to sap the recipient’s initiative, independence and propensity for securing paid employment is widespread and is often assumed to be an objective fact (rather than a concept) by public officials, social commentators and the media. Consequently, charges of “welfare dependency” have often been used as the basis for cutting social assistance expenditure, restricting eligibility or preventing new initiatives.’ (2006:iv)

from PWP evaluations, with the policy discourse turning a blind eye to these catastrophic failures in policy analysis, rendering PWPs in many instances ‘black box’ interventions.

This situation is exacerbated by the loose and inconsistent adoption of PWP terminology, with the single-term PWP representing, in the literature and policy discourse, a wide variety of programme types that are only loosely conceptually connected, with a diversity of objectives and widely divergent spheres of effectiveness. This lack of conceptual clarity contributes in turn to the repeated adoption of inappropriate forms of PWP in given contexts, with a mismatch between PWP form and function. The limited evidence base, together with basic labour market theory, can illustrate the inappropriateness of types A and C short-term PWPs in the context of many sub-Saharan African countries where the labour market crisis is chronic, and where programme design is unlikely to provide the desired social protection outcomes (current examples being Malawi, Tanzania and South Africa).

12.5 Why Do the Findings Matter?

These findings are significant as they illustrate that PWPs are repeatedly implemented with social protection objectives, yet without an adequate evidence base to attest to their ability to meet these objectives, a scenario which led a senior South African government official to describe the national EPWP as ‘an accountability free zone’ (McCord, 2006a), an appellation which may well be appropriate to PWPs well beyond the South African sphere of operation.

This matters as PWPs are regularly selected over alternative social protection instruments, and the argument presented in this thesis suggests that the result is the elevation of the cost of social protection provision for the working age poor. These costs are borne both by beneficiaries, due to the costs associated with accessing social protection through a PWP as a result of the work conditionality, and also the state, as PWPs entail a greater cost to the fiscus per unit transferred than alternatives such as cash transfers, while there is no empirical evidence that there is a commensurately greater benefit.

In implementing a PWP, governments must allocate scarce administrative and financial resources to execute high cost social protection interventions, and while the administrative cost is borne at the expense of reduced administrative allocations to other government interventions, the financial cost is either borne from the fiscus, in which case this will entail

significant opportunity costs in terms of alternative, potentially more pro-poor interventions, or through donor funds. Where donor funds take the form of loans, as in the case of Malawi's MASAF PWP, passing the cost of programmes which creating assets of uncertain value for marginal current social protection gains, to future generations provokes a serious ethical question. PWPs can also imply high opportunity costs for participants who, in pursuit of adequate income, are forced to compete for limited opportunities for labour in return for often uncertain wage rates, which are frequently below the statutory minimum wage, with unpredictable delays in remuneration, often in poor working conditions and carrying out hard physical labour (this represents a particularly high cost if one considers that many participants' health may already be compromised by chronic poverty and malnutrition). The morality of making such demands on the poor, in return for what some argue is a state's most basic responsibility to its citizens, the fulfilment of the right to basic social protection (Devereux and Sabates-Wheeler, 2007:1), is questioned by the analysis set out in this thesis (see also Standing (2002 and 2008)).

Hence, this thesis raises questions of empirical rigour, policy realism, and ultimately also morality. Instead of recognising the deficiencies in the PWP models selected in the region, policy makers have chosen to retain their ideologically driven preferences, retaining the language of graduation, exit strategies, self-targeting, and labour market solutions to poverty and social protection provision which together comprise an attractive rhetorical package, irrespective of the lack of robustness of these concepts and the failure of the empirical record to support these notions. This rhetoric also tends to pervade academic literature, irrespective of the reality of PWPs on the ground.

This thesis is therefore an attempt to make the case for a reconsideration of the function of PWPs in the current social protection discourse, and to argue that the current PWP approach may not look so attractive from the beneficiary perspective. Only fleeting glimpses of their reality is revealed in the literature: the workers who have graduated from the short-term PWP employment 'treatment' in South Africa and who argue that their only hope of future employment is the next government employment programme in their area (Ndoto and Macun, 2005); the women who frowned, perplexed at the question as to how they had invested the capital accumulated through short-term PWP participation, and responded

laughingly that ‘we have eaten our capital!’ (McCord, 2004a); women PWP workers enduring increased malnutrition as a result of hard physical labour in Bangladesh so that their families can benefit from the PWP wage (Helen Keller International, 2007); the workers unable to meet basic ILO labouring norms due to poor physical health and malnutrition in Ethiopia (Osei Bonsu, *op cit*); or the women forced to trade sexual favours in order to access PWP employment in South Africa (Preston, *op cit*). These glimpses, however, are enough to raise questions about the prevailing assumptions underlying ongoing PWP choice, and to provoke the search for more rigorous analysis of programme impact, programme design, and the reasons for the selection of PWPs over alternative social protection interventions, to ensure that future PWP implementation does not short-change the poor.

This thesis is an attempt to address the lack of rigour in the current discourse, and to stimulate a more critical and robust analysis of this form of social protection. PWPs remain omnipresent in the social protection discourse, but in many instances they are extremely flawed and poorly designed programmes, whose form is inconsistent with their function and objectives. This thesis aims to open them up to critical scrutiny, and to improve future policy choice and programme design.

APPENDICES

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Appendix 1: The Role of Political and Ideological Factors in PWP Implementation

The conclusion of this thesis is that PWPs appear to be protected from the scrutiny and criticism to which other social protection instruments are subject, and to dominate alternative options for reasons which may not easily be linked to the empirical evidence available. In this appendix the ideological aspects of this argument are developed, and it is suggested that the prevalence of PWP responses to social protection and labour market challenges may best be viewed in relation to a set of ideological preferences and assumptions rather than on the basis of an empirical evidence base. This analysis was not included in the body of the thesis, as it represents a separate, and more reflective commentary, from the more empirically based analysis in the body of the document.

The adoption of short term PWPs, offering a one-off social protection intervention, may function well in terms of consumption smoothing in the context of temporary labour market disruptions, but, as has been argued above, is unlikely to succeed in terms of meeting social protection objectives in the context of chronic poverty. Such a response tends to offer only palliative inputs of limited significance, rather than facilitating the accumulation of resources (financial, material or human) required for participants to move out of chronic poverty. If the objective of PWP is social protection in situations of chronic poverty, PWP, as frequently implemented, may not be the most appropriate policy choice, and may not offer the apparent ‘win-win’ outcome, widely anticipated by politicians and policy-makers.

Notwithstanding these insights, out of a wide range of possible social protection options, PWP are experiencing continued popularity and policy prominence, being widely implemented throughout Africa, Asia and Latin America, often with funding from international donor agencies, including the World Bank, DFID and the ILO, on the basis of the perception that they offer a ‘win-win’ social protection option, providing employment while also creating assets, and offering a welfare transfer which is also a tangible economic investment. As has been argued above, the efficacy of PWP in situations of chronic poverty is challenged by a range of critical commentators, including those within the Bank and the ILO. Even so, such programmes continue to be implemented, and this chapter examines the assumptions underlying their continued implementation, and some of the challenges to these assumptions, drawing on experiences from South Africa and Malawi.

The *a priori* assumption that PWP have a positive impact on the accumulation of the resources required to move out of chronic poverty, which operates through three vectors; the wage transfer, improved labour market performance, and benefits accruing from the assets created, was questioned in the main body of the thesis. This appendix focuses on the key factors which lead to the dominance of PWP over alternative interventions.

Setting aside the question of the social protection impact of PWPs, it is proposed that such programmes remain attractive to donors and governments alike, for a number of reasons which are rooted in the contemporary preference for market rather than state oriented social protection approaches. When considered in this respect, PWPs may be located in the current debate regarding social protection and ideology more broadly (see Surender, 2007). In principle, PWP offer the prospect of a market based solution to the problem of social protection delivery, with both the ‘market-based’ and the ‘solution’ concepts being critical in considering the popularity of short term PWPs (type A) in the context of chronic poverty, particularly in sub-Saharan Africa. When viewed in line with this perspective, short term PWP employment offers an employment based response to social protection, which is, to a greater or lesser degree, rooted in the functioning of the market (albeit contingent on significant state funding and management), and offers the illusion of providing a ‘treatment’ which will provide a ‘solution’, with PWP employment being an event which leads to ‘graduation’ and results in either enhanced employment or self-employment outcomes. The inclusion of ‘exit strategies’ within the PWP discourse further reinforces this perception of type A PWPs as ‘treatments’, which result in the replacement of a concept of social protection provision which is fundamentally a flow concept, requiring ongoing support over time, and representing an ongoing demand on the fiscus, with a stock concept, whereby a single episode of PWP intervention is sufficient for the market to function correctly, and for further social protection inputs to be redundant. As has been argued above, this analysis does not conform closely to reality or PWP performance in the context of chronic poverty and elevated unemployment, but it is the appeal to the concept of the market which is so beguiling in PWPs, and which informs policy debate and programme selection throughout Africa.

The ‘market’ nature of PWPs may be analysed in terms of four main issues; i) PWPs are consistent with the dominant development ideology which eschews ‘dependency’ and the

perceived 'welfarism' of direct transfers, ii) they involve the production of assets, thereby avoiding the perceived trade-off between productive investment, and expenditure on welfare, iii) in the popular political discourse they are perceived as creating 'jobs' rather than offering welfare, and iv) they are perceived as leading to self-targeting by the poor, by means of a low wage rate, rendering alternative state targeting mechanisms unnecessary. It is argued that it is for these reasons that PWP are currently a popular social protection instrument in situations of chronic, as well as acute poverty, seeming to offer a 'win-win' policy option; providing employment, while also creating assets, offering a welfare transfer which is also a tangible economic investment. This renders them an attractive option for policy makers and donors.

However, it is suggested that the assumptions underlying the reasons for selecting PWP over alternative interventions may prove illusory, being based on false expectations. In the light of this a fundamental question emerges; are PWP the win-win instrument policy makers often assume? Are they an appropriate policy instrument in the context of chronic poverty? This appendix explores these questions drawing on case studies from South Africa and Malawi. In both countries PWP-based responses to poverty and unemployment play a central role in both national social protection policy, and equally, if not more importantly, the popular political discourse.

Ideological concerns: the Work Ethic, Dependency and Welfarism

One reason for the popularity of PWPs is their consistency with the dominant development ideology in relation to the work ethic, dependency and welfarism. The PWP work requirement is consistent with an assumption that the work ethic may be absent among those in poverty, and a belief in the intrinsic benefit of having the poor work in return for social protection to prevent 'laziness' or a diminution of the work ethic arising as a result of unconditional social assistance, a sentiment which is widely cited during social protection policy dialogues. This assertion is problematic in the context of the extremely low value transfers frequently made through social protection programmes and the fact that the poor

are unlikely to rely exclusively on social assistance income for their livelihoods,²⁸⁰ to the detriment of other income or subsistence generating activities.

Likewise PWP are consistent with the dominant development ideology which eschews the perceived 'dependency' effect of direct transfers. Within this discourse it has been asserted that public works represent a significantly different intervention from direct transfers in terms of their dependency effect. Both the concept of dependency itself, and the differential dependency impact of public works compared to other interventions has been challenged.²⁸¹ However, if the terminology of 'dependency' is accepted, it is not clear that any significant distinction can be drawn between PWP and other forms of social assistance rendering one less 'dependency-inducing' than the other – in situations of mass unemployment/underemployment and chronic poverty, PWP employees come to depend on PWP employment, representing a form of 'dependence' arising from absolute reliance on the state to provide employment, which is as strong as the dependence on the state for direct grant transfers. Where the programmes may differ significantly is in terms of the dignity often conferred on PWP participants by virtue of employment, and also, in some instances, the possibility of acquiring skills which may lead to improved employment opportunities, neither of which are liable to accrue to those simply receiving transfers.²⁸² It is interesting to note that while some PWP confer related psychosocial benefits, namely the 'self respect and independence' ascribed to employment by Sen (1993) (see for example the psychosocial benefits reported in chapter eight), PWP are not necessarily empowering, and that the ILO

²⁸⁰ It is interesting to note that the concept of 'benefit scroungers' implied by this concern has spread along with the ideology of dependency from developed to developing economies, despite the fact that the value of many PWP transfers still leave participating households well below the poverty line, rendering the concept of such a transfer engendering laziness if not accompanied by a work requirement somewhat puzzling. For example gross public works wage in South Africa vary between R350 and R600 per month (approximately £30-£55), leaving over 90% of participating households below the poverty line (McCord 2004a) and in Malawi the World Bank and DFID funded Social Action Fund public works programme offers remuneration of MK792 per month (approximately £4), again leaving participating households well below the poverty line (McCord 2004b).

²⁸¹ See Meth (2004c) for an overview of this debate, with particular reference to PWP.

²⁸² It should be noted however that impact of skills acquisition through PWP may be limited by both the short duration of employment, and hence the short period available for skills transfer, and also by constrained demand for semi-skilled workers in the construction sector, particularly in situations of slow economic growth, and mass unemployment, as discussed in chapter seven.

argues that contrary to the popular belief, the norm is for PWP employment to be stigmatizing (ILO, 2004: 372).

Hence the work requirement is considered positive from an ideological perspective in terms of promoting the work ethic, and reducing 'dependency'. However, as discussed above, the work requirement can also have negative impacts in terms of the opportunity cost it implies. For households without access to sufficient resources for current consumption, the requirement may lead to the choice to divert labour into PWP in order to gain immediate cash income, and away from own production, often agricultural activities, with potentially negative medium to long term livelihoods consequences, which would not arise in the case of a simple transfer. This is particularly problematic in situations where participants are engaged in small scale agriculture, and programme implementation coincides with periods of high agricultural activity. Equally, the work requirement may lead to the foregoing of alternative income generating or subsistence activities, see for example Datt and Ravallion 1994b, or McCord 2004a. This consideration is recognized by the World Bank;

'Since poor people can rarely afford to be totally idle, they often give up some form of income to join a workfare scheme' (World Bank, 2001:156)

Hence, it is not clear that the work requirement has the function of either preventing 'dependency' or supporting the 'work ethic', nor is the introduction of an opportunity cost a uniquely positive innovation, particularly in labour constrained poor households engaged in small scale domestic production. However, the language of PWP is consistent with an ideology which is preoccupied with such concerns, even where they may be fallaciously constructed, and in the light of this public works programmes may be perceived as a more ideologically acceptable form of social assistance within the dominant discourse than cash transfers (Meth 2004c), despite the potentially negative impact of the work requirement.

Job Creation

PWP are popular with politicians as they offer the opportunity for a government to claim to be 'creating jobs' in a far more immediate, direct and observable way than through the opaque medium to long term processes which deliver genuine economic growth and

employment. This renders PWP attractive in terms of political visibility, and it is no coincidence that Subbarao et al (1997) and McCord (2007b) note the frequency of the initiation of public works programmes in the run up to elections, in order to win popular political support, recent examples being AGETIP in Senegal (Wade, 2004), the EPWP in South Africa and the NREGP in India, all of which were initiated at a time of political instability when governments needed to shore up their support base in the group prioritised for PWP employment (McCord, 2007b).²⁸³ Since they are presented as offering ‘jobs not grants’, PWPs reinforce the impression of selecting a policy option which will avoid dependence on social assistance. However, as has been argued above, the reality of PWP employment frequently belies this anticipated outcome, with the majority of PWP employment in Africa being short term and temporary in nature (Subbarao et al, 1997), conforming to type A PWPs. In South Africa and Malawi, government PWPs tend to offer employment for between two and four months, and while such programmes may be presented as ‘employment creation’ programmes, in reality they provide only short term employment episodes,²⁸⁴ such as would be appropriate in the context of acute crises, rather than an appropriate response to a situation of chronic poverty. The nature of most PWP ‘employment’ is particularly problematic when considered in relation to the ILO concept of ‘decent work’, with which it is in serious conflict, further challenging the frequently implicit assumption that PWPs, particularly type A, are ‘creating work’ (for a more detailed discussion see McCord, 2007c). As argued in the thesis, offering a temporary consumption smoothing intervention is not synonymous with ‘creating employment’, and in the context of chronic mass unemployment and poverty represents a serious mismatch between problem and policy response.

²⁸³ An example of this is the fact that one of the criteria used to evaluate the success of AGETIP in Senegal is ‘visibility per unit of spending’ (Wade, 2004).

²⁸⁴ It is interesting to note that in South Africa the government has adopted new terminology in response to the criticism that the national Community Based Public Works Programme (CBPWP) implemented in South Africa during the 1990s, and the current EPWP do not create actual jobs or ongoing employment. The current discourse now uses the phrase ‘employment opportunities’, in order to give the impression of job creation in policy discussions, while at the same time technically avoiding the claim that the programme is creating ‘jobs’.

While participants work in return for payment, thereby qualifying technically as employees, the value of the work they are carrying out is in many instances open to question, with the quality and economic or developmental relevance of the asset being created frequently omitted from project monitoring and evaluation criteria.²⁸⁵ A consequence is that much work carried out under the aegis of PWP may in fact be ‘make-work’ rather than genuinely contributing to the livelihoods either of those employed on the programme, or the wider community (see for example Subbarao et al, 1997), illustrating the somewhat illusory and imperfect nature of the ‘market’ aspect of PWP implementation.

If the scale of employment in PWP were sufficiently large relative to the scale of unemployment, and the duration of employment sufficiently extended²⁸⁶ then it would be appropriate to speak of ‘employment creation’ and attendant social protection benefits, however, the effectiveness of small scale temporary PWP in the context of chronic poverty and mass under or unemployment remains open to question, as argued above. Hence while governments can claim to be ‘creating employment’, the short term nature of the employment created under many PWP, and the limited likelihood of such employment in terms of social protection (either directly or indirectly) undermine the assumed positive social protection outcomes in the context of chronic poverty.

Asset Creation

The creation of assets is generally included as a key rationale for the selection of PWP interventions over alternative social assistance measures, as PWPs avoid the perceived trade-off between ‘productive’ investment in infrastructure, and ‘consumption’ expenditure on

²⁸⁵ In neither the South African government funded CBPWP or EPWP, nor the Malawi Social Action Fund PWP, funded by the World Bank and DFID, were the quality or economic value of the assets created included in the programme monitored or evaluated.

²⁸⁶ Subbarao et al argue that in the context of chronic poverty, public works employment must be offered year-round (Subbarao et al, 1997:84), as do Datt and Ravallion who state that failure to obtain this work whenever needed will tend to undermine the social insurance function of public-works schemes’ (Datt and Ravallion, 1994a:1358).

welfare. In this way PWP offer the potential to kill two birds with one stone, combining social assistance and asset creation, as Smith observes with reference to Malawi;

‘as far as possible safety nets in Malawi need to be productivity-enhancing (for example in the form of public works [...]), rather than pure transfers – [...] to maximize long-term income growth among the poor’ (Smith, 2001:13).

This is also the basis of the ILO’s promotion of PWPs, as a means to promote the infrastructural investment necessary for growth, as well as providing ‘employment’. However, the beneficial economic and developmental value of the assets created through PWP is frequently assumed rather than empirically established, as discussed in chapter six. In some instances such as the flood and drought-related assets created in Bangladesh and India which have a direct impact on mitigating future risk and promoting land productivity, the economic benefit of the infrastructure created is readily apparent, in terms of a reduction in flooding and improved water harvesting. Where the assets created are intended to promote economic growth rather than mitigate known environmental threats, the value of those assets is less apparent, and there is little empirical evidence. Under these conditions evaluation is critical, yet frequently not carried out. An example of the conflation of expenditure on asset construction with poverty alleviation which underlies this problem is to be found in the *South African Ten Year Review*, which justifies the claim of poverty alleviation by stating the amount spent and the number of assets constructed under PWP, rather than offering any analysis of the impact of these assets on poverty;

‘these [public works] programmes have been successful in alleviating the asset poverty of communities. Over R6.5 billion of expenditure on infrastructure has provided 2 182 community assets. (South Africa, Policy Co-ordination and Advisory Services (PCAS), 2003:19).

In South Africa and Malawi, there is little evidence of a positive economic or livelihoods impact arising as the result of infrastructure created through PWPs, (or for that matter evidence to the contrary), since data is not gathered on this aspect of public works programmes, despite this being an intrinsic component of programme objectives. The objective of one DFID-funded PWP in Malawi was ‘to contribute to a sustained improvement in the livelihoods of the poor and to longer-term economic growth in Malawi’ (UK DFID, 2004b) and the World Bank and DFID funded PWP component of the Malawi Social Action Fund (MASAF) described itself as a ‘safety net operation’ (Government of

Malawi, 2003). Since both programmes offered only short term employment, the wage transfer is unlikely to function as a safety net or instrument for sustained livelihoods improvement, and hence the potential of the programmes to achieve their anticipated outcomes is dependent on the ability of the assets created to deliver significant benefits to participants, which has not been evaluated. The frequent failure to evaluate the benefit of assets created is partly due to methodological constraints relating to assessing the impact of infrastructural assets, a fact acknowledged in the 2004 World Development Report (Chapter eleven),²⁸⁷ and partly relates to the fact that programme evaluation tends to be limited to the period of programme execution, ie funding disbursement, rather than extended to incorporate medium term post programme asset performance, in terms of quality, durability and sustainability or utilisation (chapter six). However, it is also informed by an implicit and frequently unsubstantiated assumption within the PWP discourse that the creation of assets such as roads or community structures, is, *de facto*, of economic or livelihoods benefit, either to participants, or the broader community.

In some instances the construction of a road may have positive direct and indirect effects for a community, but this cannot be assumed *a priori*, and it is critical that this assumption is evaluated. A recent study in South Africa highlighted the potential for discrepancies between the aspirational objectives and actual outcomes in a rural road construction programme, attributing this to the inability of asset creation alone to promote livelihoods in the absence of coordinated rural development initiatives (Mashiri and Mahapa, 2002). This challenges the assumption underlying the creation of assets through PWPs, and places PWP asset performance within its institutional setting, which is noticeably absent from the PWP debate. Subbarao and Smith noted a similar problem with PWP in Ethiopia, observing that;

‘Workfare programs are not integrated with activities at various levels of government [...] because there has been no integration of aid-funded projects with the broader developmental activity [...] the program suffered from [...] low productivity (did not lead to assets of the type found in India’s Maharashtra employment Guarantee Scheme). The program is driven by the consideration of labor use [...] rather than the creation of assets consistent with regional (community) needs and priorities [...].’

²⁸⁷ Despite their positive conclusions regarding the impact of rural road construction in China even Gannon and Liu concede “knowledge of the transport conditions of the poor, and especially how these interact with other factors [...] is modest” (Gannon and Liu, 2000).

As a result [the] aim to use food aid as a “dual purpose instrument of relief and development” did not materialize’. (Subbarao and Smith, 2003:21-22).

In many instances assets created under PWP may be white elephants, unstrategically selected and uncoordinated with broader development initiatives. Also, serious questions arise in terms of which segments of the population benefit from the creation of various assets and over what time horizon. There is a tension between the creation of assets which may promote national growth, but not have a significant impact on the livelihoods of the poor in the short to medium term, such as road infrastructure on the one hand, and those which may promote development and sustainable livelihoods for the poor in the short term, such as improved irrigation, but may not contribute significantly to national growth. These are some of the key questions which frequently remain both unasked and unanswered in the PWP discourse.

The work requirement of PWPs does have the potential to make a significant contribution to development, at either local or national levels, and in some instances both. However, in many cases the contribution of public works assets to development passes unmonitored, despite the critical importance of the asset creation function of public works programmes in the decision whether to adopt public works programmes or alternative social assistance instruments. This situation is frequently further exacerbated by lack of planning or budget allocations for asset maintenance, which further undermines the potential benefit of the asset component of public works.

This question is particularly interesting if policy makers anticipate that long term benefits will accrue from assets created through PWP interventions. The transfer benefits of PWP participation will be limited to the duration of the programme, and are unlikely to confer long term benefits themselves, hence the ability of a PWP to deliver a sustained reduction in poverty is contingent on whether the assets created confer long-term benefits on the poor. This is of critical importance given the high non wage component in PWP budgets, with wages typically comprising between 30 and 60% of the total programme cost (Subbarao et al 1997:80), the rest being consumed in material and management costs, rendering the net cost

of unit transferred through public works significantly higher than alternative measures,²⁸⁸ an insight accepted by the World Bank, who concede that;

‘Workfare programs are not necessarily an inexpensive way of delivering benefits to poor people’ (World Bank, 2001:155).

Unless the assets are of economic value in terms of promoting either livelihood or growth improvements (direct or indirect), then any PWP premium is hard to justify. The paucity of interest in monitoring and evaluating this aspect of PWP is problematic. Evaluation of the economic value of the assets created has not been part of either the World Bank and DFID supported Social Action Fund PWP in Malawi, or the South African government’s EPWP or its predecessor, the CBPWP, both of which are based on the assumption that PWP produced assets will promote local and national growth through the provision of public services (see Government of Malawi, 2003, and Phillips, 2004 respectively). This is evidence of a lack of donor and implementer interest in ascertaining the economic value of PWP created assets over time.

Self Targeting

The fourth assumed benefit of PWP is that they are perceived to offer benefits in terms of their simplicity of targeting, using self-targeting through a low wage rate to reach the poor, rather than targeting criteria which are complex and costly to administer. This self-targeting aspect of PWP is based on the premise that the work requirement and low wages, conventionally set at or below the prevailing wage, lead to an outcome in which the poor self select themselves into the programme, leading the World Bank to assert confidently that;

‘They [public works programmes] can easily be self-targeting by paying wages below market rates.’ (World Bank, 2001:155).

This assumption is prevalent in the PWP literature, see for example Subbarao et al;

‘The best way to ensure that the program reaches the poor is to maintain the program wage at a level no higher than the ruling markets wage for unskilled labor’ (Subbarao et al, 1997:77).

and

²⁸⁸ Smith calculated a per unit cost of 13.9 to transfer a unit to the poorest in Malawi through public works, compared to 1.73 through cash transfers (Smith. 2001:39).

‘maintaining a low program wage ensures that participation rates are low, attracting only the poorest to work sites’ (ibid:78).

The argument continues that if the wage is increased, inclusion errors of non-poor also increase, citing evidence from Kenya (Teklu, 1994). In this way it is assumed that the poor will select themselves into programmes, while the less poor will find them unattractive and not seek to participate.²⁸⁹ This then obviates the need for the administration of more complex forms of poverty targeting, based on various forms of means testing. This principle is fully discussed in Subbarao et al, 1997. This assumption is supported in part by evidence from the MEG, whose remuneration was set at the minimum wage. Ravallion et al have illustrated how leakage to the non-poor increased significantly after the minimum wage was increased above the ‘prevailing wage’ in the 1980s (Ravallion, Datt and Chaudhuri, 1991). This supposed ease of targeting is therefore a major factor in the selection of PWP as a social protection instrument, particularly when the programme is to be implemented by the private sector. The implementation of explicit targeting criteria is costly in terms of both budget, and skills and is problematic if the programme is to be implemented by the private sector (the social development skills required to ensure effective targeting within a community may be scarce if the programme is to be implemented by construction sector contractors), rendering the ‘self targeting’ nature of PWPs a great benefit. It is assumed that spontaneous poverty-related self-targeting will take place through the market, on the basis of the wage rate.

A wide range of literature suggests a degree of leakage to the non poor in PWPs which challenges this assumption. Analysis examining incidence is rare in PWPs offering short term employment (Type A), as typically data is not gathered on the socio-economic characteristics of participants in these programmes, rendering incidence analysis problematic²⁹⁰. However, where incidence analysis has been possible, largely in the context

²⁸⁹ The terms ‘poor’ and ‘less poor’ will not be further defined in this paper. The purpose of this paper is to explore participation in PWP using a relational concept of poverty, the poor and less poor, given the majority of the population in many developing countries may be defined as poor, and hence it may be most useful to differentiate within the category of the poor rather than seek to define those who fall within or outside this category.

²⁹⁰ For example, neither the EPWP in South Africa nor the MASAF PWP in Malawi gathered data on the socio-economic characteristics of participants, despite the anticipated social protection function of these programmes, rendering analysis of the efficacy of targeting, or programme incidence problematic.

of Indian PWP, evaluations repeatedly indicate participation by those who may not be classed as among the poorest, (those for whom the intervention was intended), not only in terms of inclusion in the payment roster, but also in terms of physical participation. In theory self-targeting should preclude this, providing the wage is sufficiently low, but Barrett and Clay (2003) argue that even with wage levels at or below the prevailing wage, the marginal value of labour varies considerably within and between households, contingent on the amount of labour available in the household and access to productive assets such as land. This variation in the marginal value of labour renders PWP employment attractive to surplus labour in less poor households in some cases, as a form of supplementary income, yet unattractive to poorer households with limited access to labour.²⁹¹ When the imperfection of labour markets is taken into consideration, Barrett and Clay argue that economic theory confirms the empirical finding, that self-targeting through a low wage may not be adequate to achieve incidence in line with that intended. They argue moreover that a wage set at an extremely low level may be contrary to the social protection objectives which form the fundamental rationale for programme implementation. This analysis is particularly relevant where labour markets are highly segmented and the prevailing market wage in the lowest segment is extremely low, as in the *ganyu* (informal contract labour) system in Malawi, where the daily *ganyu* wage is approximately MK33/day (US\$0.16) (Chirwa et al, 2004a). Replicating this wage level in a PWP is unlikely to have any significant impact on poverty (McCord, 2004b), and creates a serious tension with a programme nominally intended to provide social assistance.

In this context Subbarao's assertion that a wage rate no higher than the prevailing market wage is an ideal PWP design feature (Subbarao, 2003:14), is problematic as is his response to the hypothetical question 'how low should the program wage be?'. Subbarao argues that the wage 'should not be set not be set at such a low level that it stigmatizes the work, thus leading the 'poor but proud' to go hungry' (ibid:10), irrespective of the fact that the social protection impact of PWP is a function of the value of the wage, or that a low wage may

²⁹¹ This theoretical analysis confirms empirical programme evaluation findings, such as the review of the DFID funded Sustainable Livelihoods Through Inputs for Assets (SPLIFA) public works programme in Malawi, which found non-poor participants from labour rich households self selecting into the programme despite extremely low wage levels, DFID 2004b.

serve as a barrier to participation by the labour constrained poor.²⁹² Barrett and Clay present a fundamental challenge to this accepted, but problematic argument, and conclude that higher wages, together with alternative targeting mechanisms would be the appropriate response if social protection outcomes are the goal, since low wages in PWP are *not* sufficient to ensure adequate poverty targeting, and low level transfers may be inconsistent with programme objectives. This represents a significant challenge to the fourth assumption informing the selection of PWP over alternative interventions.

In situations of chronic poverty and mass unemployment/underemployment where the scale of PWP employment offered is trivial in relation to the scale of the unemployment and poverty problem, it is likely that competition for PWP employment will further erode any putative poverty based self-targeting, in the absence of explicit poverty targeting activities. In South Africa for example, where the national PWP aims to offer 200,000 employment opportunities per annum in the context of unemployment of more than 4 million, such targeting problems are likely to occur.

Overview of Assumptions Informing Policy Choice

It is not evident that PWP constitute a social protection instrument which can simultaneously i) create work and avoid dependency, ii) create assets which will promote livelihoods and or growth, and iii) through self targeting spontaneously deliver resources to the poor, in the context of chronic poverty. This insight offers a serious challenge to the assumptions and prejudices which continue to inform policy choice, in the absence of adequate supporting evidence.

Conclusion

On the basis of cross country experience Subbarao et al are confident to assert that;

‘public works are essentially a temporary safety net and should never be used as a permanent escape route from poverty’ (Subbarao et al, 1997:168).

²⁹² Subbarao recognises that ‘a low wage rate will also result in low transfer earnings to each (poor) participant’, (Subbarao 2003:4), but does not explore the consequences of this statement in terms of the efficacy of public works as a form of social assistance.

The ILO is also forthright in its criticism of the reality, as opposed to the ‘presentation package’ offered by PWP, confirming the critique set out in this appendix;

‘In sum, public works have long appealed to those concerned with poverty and unemployment. They are frequently used in developing countries, and are often presented as the means of creating public infrastructure, generating jobs and ‘targeting’ the poor. Unfortunately there are reasons for skepticism about the wilder positive claims made for public works. One is that that they use up a lot of scarce resources, and result in low productivity work being done. Another is that they are not very good at ‘targeting’. The poorest and most insecure are likely to be at the end of the queue for these casual jobs. [...] And perhaps above all, they have to be massive schemes if they are to have much effect on the incidence of poverty and economic insecurity.’ (ILO, 2004:372).

Yet at the same time short term (Types A and C) PWP continue to be implemented with social protection and long term developmental objectives, with donor funding and support, highlighting a programme choice ambiguity. The limitations of such interventions are documented, yet donors are still willing to endorse them in preference to the alternatives. It is not possible to explain this policy dominance in situations of chronic poverty in terms of either empirical evidence or theory. It is only possible to explain it in terms of the ideological attractiveness of PWP, which includes their apparent ease of self targeting, and the fact that they involve the creation of assets. Ideological interests appear in some contexts to dominate theoretical and empirical programme choice arguments, and may represent a victory of political over ‘technical’ considerations in the sphere of social protection.²⁹³

As argued above, the assumptions underlying the choice of PWP are problematic, and it is clear that programmes offering short term PWP employment are unlikely to deliver the goals of social protection and development frequently ascribed to them in both the national and international policy discourse. Notwithstanding these criticisms, such programmes continue to be popular with governments and donors alike. This enthusiasm is not necessarily shared by participants who recognize the limited social protection impact of such programmes; only one third of participants in a DFID and ILO supported programme in South Africa considered that the programme would have any sustained impact on their livelihood,

²⁹³ For a discussion of the inherent tension between political and ‘technical’ considerations in the South African policy environment, with reference to the issue of poverty, see Everatt (2003:89-90).

(McCord, 2004a). However the issues of lack of voice among participants, and imperfect feedback loops, discussed in the 2004 World Development Report, (World Bank, 2004), apply egregiously in the case of many PWP, such that the failure of PWPs to function as anticipated in the ideologically driven policy discourse does not serve as a mechanism to challenge ongoing programme design norms.

As this appendix has argued, PWP appear to dominate alternative options as the result of a number of ideological preferences and assumptions. The problem is that while short term type A and C PWPs, providing a one-off social assistance intervention, may function well in terms of consumption smoothing in the context of one-off labour market problems of varying degrees of severity, they are unlikely to succeed in achieving social protection objectives in the context of chronic poverty. Such a response tends to offer only palliative inputs of limited significance, rather than facilitating the accumulation of productive assets required for participants to move out of chronic poverty. If a fundamental programme objective is social protection in situations of chronic poverty, type A and C PWPs, as frequently implemented particularly in sub-Saharan Africa, may not be the most appropriate policy choice, and may not offer the apparent 'win-win' outcome, widely anticipated by politicians and policy-makers, on the basis of their market oriented analysis of both the problem and the appropriate policy response. Type A PWPs are designed within a particular ideological paradigm, which reflects the assumption that market interventions will enable the labour market to work more smoothly to resolve significant social protection problems, and is at same time responsive to related ideological concerns regarding dependency and welfarism. However, the assumptions underlying this position are not borne out by closer examination, and, inasmuch as evidence is available, are not robust in the face of empirical analysis.

Appendix 2: PWP Institutional Delivery Mechanisms

Production arrangement	Force account	Contracting				
Approach	Force account	Using established contractors		Developing small-scale contractors		
Delivery mechanism	Force account	Conventional	Sub-contract	Govt-run	Agency	Dev't team
Diagram	Employer ↓	Employer ↓ Established contractor ↓	Employer ↓ Established contractor ↓ Small contractors ↓	Employer ↓ Small contractors ↓	Employer ↓ Consulting firm ↓ Small contractors ↓	Employer ↓ Small contractors ↔ Established contractors or consulting firms ↓
Examples	Benin, Botswana, Burundi, Kenya, Rwanda, etc.	South Africa (1992)	South Africa, India	Benin, Ghana, Kenya, Lesotho, Namibia, South Africa, etc.	Benin, Chad, Mali, Niger, etc.	South Africa

Source: Stock and de Veen (1996)

Appendix 3: PWP Participant Maximum Education Attainment (%)

	Gundo Lashu Percentage of participants	Zibambele Percentage of participants
No education	6.2 (n=21)	31.1 (n=128)
Grades 1-4	5.1 (n=17)	27.9 (n=115)
Grade 5-7	19.9 (n=67)	22.6 (n=93)
Grade 8-10	35.6 (n=120)	15.3 (n=63)
Grade 11-12/Diploma without matric	31.8 (n=107)	3.2 (n=13)
Higher than 12 NTC I/Diploma with matric	1.5 (n=5)	0 (n=0)
Total	100% (n=337)	100% (n=412)

Source: Own calculations using PWP Survey 2003.

Appendix 4: Modal PWP Participant Education Levels by Gender and Age

Age	Gundo Lashu	Zibambebe	Gundo Lashu	Zibambebe
	Male	Male	Female	Female
	Grade	Grade	Grade	Grade
Under 20	8	-	-	-
20-29	12	-	12	8
30-39	11	7	12	0
40-49	8	0	8	0
50-59	1 and 2	0	0	0
60-69	-	-	0	0

Source: Own calculations using PWP Survey 2003.

Note: - denotes insufficient data

Appendix 5: Literacy Among PWP Participants by Gender and Age (%)

Age	Gundo Lashu	Zibambebe	Gundo Lashu	Zibambebe
	Male (n=164)	Male (n=29)	Female (n=173)	Female (n=389)
Under 20	100 (n=8)	100 (n=1)	100 (n=1)	- (n=0)
20-29	100 (n=70)	100 (n=4)	100 (n=47)	91 (n=22)
30-39	96 (n=45)	67 (n=4)	98 (n=63)	85 (n=71)
40-49	83 (n=25)	56 (n=5)	83 (n=34)	66 (n=97)
50-59	63 (n=5)	14 (n=10)	56 (n=10)	47 (n=55)
60-69	100 (n=1)	0 (n=0)	0 (n=0)	42 (n=8)

Source: Own calculations using PWP Survey 2003.

Note: - denotes insufficient data

Appendix 6: PWP Household Asset Ownership

Asset	Gundo Lashu	Zibambebe
	% households reporting ownership	
Vehicle	9	1
Motorcycle	2	0
Tractor	2	0
Plough	16	2
Television	40	14
Radio	80	57
Bed	83	77
Watch/clock	74	60
Books	73	66
Sewing machine	21	7
Sofa	41	22

Source: Own calculations using PWP Survey 2003.

Appendix 7: Chi-squared Test Results of Significance of Differing Household Asset Ownership between Gundo Lashu and Zibambele Households

Asset	Chi-Squared Test Results at 0.05 Significance Level
Vehicle	$\chi=27.0052$ $p=0.000$
Motorcycle	$\chi=7.9293$ $p=0.005$
Tractor	$\chi=6.5397$ $p=0.011$
Plough	$\chi=39.9434$ $p=0.000$
Television	$\chi=58.6831$ $p=0.000$
Radio	$\chi=38.9514$ $p=0.000$
Bed*	$\chi=2.9038$ $p=0.088$
Watch/clock	$\chi=14.8851$ $p=0.000$
Books*	$\chi=3.7289$ $p=0.053$
Sewing machine	$\chi=28.6235$ $p=0.000$
Sofa	$\chi=29.0610$ $p=0.000$

Source: Own calculations using PWP Survey 2003.

Appendix 8: Whole Population Dependency Ratios under Different Assumptions

Groups included	Limpopo	KwaZulu-Natal
No exclusions	0.88	0.64
Exclude households not living in housing units	0.89	0.65
Exclude non Black African households	0.89	0.69
Exclude urban households	0.93	0.82
Exclude households in Sekhukhune District in Limpopo	0.84	0.64
Excluding all subgroups	0.95	0.85

Source: McCord and Wilkinson (2009)

Appendix 9: Comparison of Characteristics of Matched Sample with and without Household Weights – Capricorn

Characteristic	Survey	Matched (not weighted)	Matched (weighted)
Mean age of head of household (years)	54.21	56.30	56.24
Mean household size (persons)	6.99	7.06	7.02
Dependency ratio ²⁹⁴	0.67	0.72	0.72
Traditional dwellings	12.61%	11.34%	11.22%
Owning a TV	36.97%	40.76%	40.72%
Owning a radio	79.83%	86.13%	85.71%
Female-headed household	40.76%	42.86%	43.20%
Household heads with no schooling	33.61%	35.71%	35.79%
Household heads with some primary schooling	24.37%	26.89%	26.75%
Household heads with complete primary schooling	7.98%	5.04%	5.02%
Household heads with some secondary schooling	29.83%	28.15%	28.22%
Household heads with grade 12 / standard 10	3.78%	3.78%	3.77%
Household heads with higher education	0.42%	0.42%	0.44%

Source: McCord and Wilkinson (2009)

²⁹⁴ Sum of dependent persons in the household (aged under 15 or over 64) divided by the sum of non-dependent persons.

Appendix 10: Comparison of Characteristics of Matched Sample with and without Household Weights – KwaZulu Natal

Characteristic	Survey	Matched (not weighted)	Matched (weighted)
Mean age of head of household (years)	48.53	48.69	48.59
Mean household size (persons)	7.11	7.24	7.13
Dependency ratio ²⁹⁵	0.84	0.95	0.93
Traditional dwellings	87.50%	87.50%	87.35%
Owning a TV	14.25%	13.50%	13.29%
Owning a radio	56.75%	57.25%	57.08%
Female-headed household	70.25%	74.00%	73.38%
Household heads with no schooling	35.75%	35.25%	34.72%
Household heads with some primary schooling	39.75%	43.75%	44.44%
Household heads with complete primary schooling	8.00%	5.25%	5.35%
Household heads with some secondary schooling	15.50%	13.75%	13.57%
Household heads with grade 12 / standard 10	1.00%	2.00%	1.92%
Household heads with higher education	0.00%	0.00%	0.00%

Source: McCord and Wilkinson (2009)

²⁹⁵ Sum of dependent persons in the household (aged under 15 or over 64) divided by the sum of non-dependent persons.

Appendix 11: Recipients of Community Contributions from PWP Households

	Gundo Lashu households		Zibambele households
	Households with former PWP workers (n=113)	Households with current PWP workers (n=149)	(n=404)
	% of households who give to each group		
Absent household members	6 (n=7)	5 (n=8)	3 (n=14)
Relatives not in household	13 (n=15)	19 (n=28)	5 (n=20)
Neighbours	12 (n=14)	11 (n=16)	22 (n=88)

Source: Own calculations using PWP Survey 2003.

Appendix 12: Impact of PWP Income on Nutrition: Frequency of adults not eating for a day

% of households reporting this behaviour		Before	After
Current Gundo Lashu (n=114)	Most of the time	11 (n=12)	8 (n=9)
	Never	57 (n=66)	79 (n=90)
Former Gundo Lashu (n=148)	Most of the time	15 (n=22)	9 (n=14)
	Never	70 (n=103)	76 (n=113)
Zibambele (n=413)	Most of the time	40 (n=164)	0.24 (n=1)
	Never	15 (n=61)	85 (n=353)

Source: Own calculations using PWP Survey 2003.

Appendix 13: Impact of PWP Income on Nutrition: Frequency of reducing size of children's meals

% of households reporting this behaviour		Before	After
Current Gundo Lashu (n=111)	Most of the time	11 (n=12)	6 (n=7)
	Never	64 (n=71)	80 (n=89)
Former Gundo Lashu (n=149)	Most of the time	16 (n=24)	9 (n=13)
	Never	70 (n=104)	79 (n=117)
Zibambele (n=411)	Most of the time	52 (n=214)	1 (n=3)
	Never	13 (n=52)	80 (n=328)

Source: Own calculations using PWP Survey 2003.

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